DOCUMENT RESUME

ED 231 305 HE 016 369

AUTHOR Poole, W., Ed.; Novak, J., Ed.
TITLE Options for the 80's: Research That Makes a Difference. Proceedings of the Annual College of Education Graduate Conference, (2nd, St. Catherines, Ontario, November 6, 1982).
INSTITUTION Brock Univ., St. Catherines (Ontario).
PUB DATE 6 Nov 82
NOTE 141p.
AVAILABLE FROM Brock University, St. Catharines, Ontario, L2S 3A1, Canada.
PUB TYPE Collected Works - Conference Proceedings (021) -- Viewpoints (120)

EDRS PRICE MF01/PC06 Plus Postage.
DESCRIPTORS Administrator Role; Computers; Discipline Policy; *Education Majors; Elementary Secondary Education; Environmental Education; *Graduate Study; Higher Education; Inservice Teacher Education; *Masters Degrees; Physical Education; Program Evaluation; Reading Instruction; Research; Science Instruction; Special Education; Stress Variables; *Student Projects
IDENTIFIERS *Brock University (Canada)

ABSTRACT

Proceedings of Brock University's Graduate Conference, which enabled Master of Education graduates to share their research findings, are presented. Twenty-seven papers are included on the following topics: reading, physical education and coaching, homelife affecting schooling, stress, board/administrator decision making, behavior disordered children, gifted children, computers in research, environmental education, invitational education, thinking skills, needs in science teaching, program evaluation, the hidden curriculum, discipline, inservice teacher education, and new directions in graduate education. Among the topics are the following: the alleged claims of superiority of the language experience approach to reading over the text method; promoting a positive self-concept in student through the physical education program; the relationship between life stresses and stresses in the teaching profession; performance review of school supervisory officers; students' use of a problem-solving method; evaluating sexism in the hidden curriculum; teacher training in curriculum process skills; and recent events in the Master of Education program and future possibilities. (SW)

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PROCEEDINGS

Graduate Conference

OPTIONS FOR THE 80'S:
RESEARCH THAT MAKES A DIFFERENCE

HE 016 369

EDITED BY:
W. POOLE
J. NOVAK

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INTRODUCTION

The second annual College of Education graduate Conference was an occasion to honor our Master of Education graduates, share their research findings, and personally invite our current students to partake in the challenge of meaningful and needed educational inquiry. Graduate students and faculty came from near and far, on a Saturday at their own expense and showed their interest and commitment to the idea that research can make a difference and help create better options as we face these difficult times in the 80's.

These proceedings begin with the introductory remarks by Dean Peter Atherton who points out the conceptual and practical difficulties inherent in the false notion of a theory/practice dichotomy. In addition he emphasizes that a good graduate student is one who has demonstrated the "ability to solve problems in the light of available knowledge and when knowledge does not exist - to create it".

MORNING PAPER PRESENTATIONS

Following this opening challenge to create and use knowledge intelligently, participants attended paper presentations on the following topics: Reading, Physical Education and Coaching, Homelife Affects Schooling, Stress, and Board/Administrator Decision Making. Let's look at each of these sessions in more detail.

READING

The two papers presented in the session were done under the supervision of Professor James Wagner and examine the alleged claims of superiority of the language experience approach to reading over the text method. Suzanne Nolan's experimented research examines the notion that self-generated material makes it easier to learn the visual features of words. She contends that "if a child can bring his own language to the learning task, the amount learned in a component skill may actually be increased because the amount to be learned is decreased". Gordon White replicates and extends Nolan's study and notes some interesting results when distractors are tested in context

rather than in isolation. This has important pedagogical implications since most teaching of reading should be done in context or sentences.

Further research is needed in this area as we attempt to delve further into the underlying processes of cognition and reading.

PHYSICAL EDUCATION AND COACHING

Physical education and coaching are not isolated aspects of the schooling experience but are fundamental extensions of the values and aims of the school. Building on this notion, Susan Kalbfleisch developed a handbook for teachers which aims at promoting positive self-concept in students through the physical education program. Placing her emphasis on the humanistic theories of William Purkey and Donald Hellison, her handbook "endeavors to assist teachers in the enhancement of their students' self-concept through teaching strategies, activities, games, lesson planning and evaluation methods for the teacher, student and program". The values of participation, self-improvement, and enjoyment of physical activity are stressed throughout the handbook.

Philip Morgan stresses these same values in "A Guide for the Elementary School Teacher - Coach". In his handbook "a parallel is drawn between the activities of coaching and teaching in an attempt to bring the reader to the realization that the activities and skills required of a classroom teacher are the same practices and talents which are fundamental to sound coaching". Using key concepts from sport psychology, he continually shows that "coaching is teaching and all that is needed is the inclination to give it a try". The handbooks of Morgan and Kalblfeisch certainly add to our inclination to try.

HOMELIFE AFFECTS SCHOOLING

The changes needed within schools are often the result of outside factors. Nancy Bufalino, in her paper "Meeting the Needs of Children from Broken Homes", points out that because "one-half of our students in this decade may be living in a single parent home, we must act now to do all that we can to meet the challenge". Her timely suggestions involve ways in which individual teachers can modify their roles, supplement curriculum and provide relevant reading material. In addition she adds some recommendations so that schools can make program and policy changes to better accommodate the one parent family and child.

STRESS

A result of the rapid changes inside and outside of schools is the further complication of the already stressful role of the teacher. The empirical research of Issam Massouh and Paul Devilliers adds some insights into this growing phenomenon.

Massouh looks at the relations between life stressers and teaching stressers emphasizing that teachers cannot neatly separate their personal and professional lives. He points out that "the magnitude of the stressers in one group could affect the magnitude of stress in the other, therefore spreading a higher level of stress to many events, including low level stressers".

In examining stress and the secondary school science teacher Devilliers mentions that fifty per cent of the group he sampled "perceived their profession as either very stressful or extremely stressful". By looking at specific high stressers for secondary science teachers he shows how these add to emotional exhaustion of teachers and add to depersonalization of students, the "initial phase" of the burnout syndrome. Further research and development regarding this problem is most certainly needed.

BOARD/ADMINISTRATOR DECISION MAKING

Moving from the classroom to the board office, different tensions emerge - those involving evaluation and decision making.

Susan Sydor, in her paper "Measuring Shadows: Planned Performance as a Contingency Approach to Evaluation of Directors of Education in Ontario School Systems" proposes a "generalized framework for performance review of supervisory officers". This framework, which was developed through interviews with directors, and supervisory officers, a literature review, and a questionnaire survey of trustees, presents seven evaluational factors. Through board and administrative cooperative effort, the framework provided may be a means of moving from mere competence to excellence.

Also stressing the necessity for board and administrative cooperation is Marilyn Sullivan in her paper "A Contingency Approach to Board-Administrative Decision Making". By outlining a contingency model which emphasizes how to decide to decide she claims that "the energies waisted in conflict and conflict resolution can be diverted into constructive activities". From the results of her survey she concludes that this is desirable and possible.

POSTER SESSIONS

A new feature of this year's conference which emphasized areas of continuing research in our M.ED. program was the addition of poster sessions. These brief, but intense sessions were presented by faculty members and students and focused on the following areas: Special Education, Computers in Research, Environmental Education, Invitational Education and Thinking Skills.

SPECIAL EDUCATION

With the heavy emphasis in Ontario schools on the implementation of Bill 82, educators are looking for defensible suggestions for meeting the needs of all of their students. Two groups of children who need special attention are the gifted and behaviorally disordered. Professor Adele Thomas, Brenda Lamothe and Elizabeth Purser presented ways these groups might be helped.

Lamothe focuses on a resource guide for gifted children and pointed out some of the alternatives available for the identification process, program development, organizational planning and curriculum implementation. Purser identifies and analyzes the following intervention strategies for the behavioral resource teacher: positive reinforcement, assertive discipline, social learning, individual psychology and invitational education.

COMPUTERS IN RESEARCH

The computer revolution is with us and many educators are finding the micro computer to be an ally in the often complicated process of doing educational research. James Kerr, in his paper "Research and Data Analysis on a Micro-computer for M.Ed. Candidates", gives some pertinent suggestions and "nuts and bolts" information for using MINITAB, the WANG 2200, and the Commodore PET/CBM systems.

ENVIRONMENTAL EDUCATION

What are we doing to our environment? What does our environment do to us? How might we develop a course of study for those interested in these complex processes?

These are the types of questions which William McNeil and Merlee Wissler address in their joint paper. "Man's Development in Relationship to his Environment". The paper refers to their combined M.Ed project which "serves both as a resource kit and as basic integrated material for unit and course development".

INVITATIONAL EDUCATION

Invitational education is a self-concept approach to teaching and learning based on the idea that students' and teachers' intellectual, emotional, physical and social potential is best actualized in environments which intentionally and systematically call it forth. This approach can be applied in creative ways in school settings to people, places, policies and programs.

Cathy Hillgren applies invitational education to the intermediate language arts program and provides a variety of inviting strategies for teaching, reading, writing, listening and speaking skills. A sample of these strategies is provided. Hal Hillgren uses the basic ideas of invitational education to create and maintain a positive climate in his special education class. An example of a calendar with inviting suggestions is presented.

THINKING SKILLS

A number of students in the M.Ed. program, under the supervision of Professor Len Popp, have done projects on the basic thinking skills. Glenn Wright in his paper "Problem Solving in Mathematics" uses this approach as an organizer in his Grade V to Grade VIII teaching and shares his results. His paper stresses the importance of having students use a problem solving method.

Lynne Blake presents an activity package for K - Grade II students and shows how skill development can be used as an alternative to workbooks. In addition, she points out how it can assist the teacher in observing, evaluating and recording student progress individually or in groups.

AFTERNOON PAPER PRESENTATIONS

After a pleasant lunch at the Pond Inlet and some comments from Ginny Gilbert of the Alumni Office, regarding the possibilities of forming a Graduate Students' Association, participants attended paper presentations on the following areas: Needs in Science Teaching, Program Evaluation, The Hidden Curriculum, Discipline, and Inservice.

NEEDS IN SCIENCE TEACHING

The single paper in this session is that of Ian Carter; "Needs Assessment: An Integrated Approach to Curriculum Development in Intermediate Science". Carter uses a curriculum process involving needs assessment, planning, development, field testing and continuous feedback, evaluation and revision to improve Junior High School Science Education. The results of his assessment were used "as a part of a rationale for a proposal to assess the entire science program from grades 7-9 in all North York schools".

PROGRAM EVALUATION

What are we doing? What should we be doing? How do we know if it is successful? Answers to these types of questions for librarians and business teachers are dealt with in the session on evaluation.

Not finding a comprehensive model for elementary school libraries and elementary school teacher librarians, James Crux decided to develop one. The model he presents is based on a performance objective approach and involves the following six categories: responsibility criteria, needs identification, objective setting, objectives performance, results assessment and results conference. It is his contention that this model is a "movement in the direction of more constructive, co-operative and progressive evaluation".

Alice Schutz' paper looks at an innovative program called "Project Business" to see if it has been successful with Grade 8 students in terms of knowledge acquisition of business concepts. Her study and recommendations should be of use to those who seek to make a link between the worlds of business and education.

THE HIDDEN CURRICULUM

That we often teach much more than we intend or think we teach, is a basic contention contained in the idea of the "hidden curriculum". In this session Sylvia Cesar and Catharine Papp look at the subtle but pervasive messages communicated to children about sex role and Indians respectively.

Cesar's "Development of a Checklist to Evaluate Sexism in the Hidden Curriculum" looks at classroom and school climate, materials, curriculum and behaviours which transmit a "rigid and restricted notion of women's and men's roles". Her recommendations are not only for teachers but for all interested in eliminating sex-role stereotyping.

Moving from sexism to racism, Catharine Papp uses a quantitative measurement of value judgements about minority groups in textbooks in her study, "An Evaluation Coefficient Analysis of Indians in Twelve Recommended Intermediate Level History Textbooks in Brant County Schools". Her study is based on the notion that "if racism against Indians is to be halted, then textbooks must not be discriminatory".

DISCIPLINE

"Knowing what to do when they won't do what you want them to do" is a continual concern to classroom teachers. Wayne Chamberlain's empirical research and Victor Worona's review of the literature should shed some light on these problems.

Chamberlain's paper is based on a survey of classroom teachers, remedial teachers, librarians, vice-principals, principals, and counsellors regarding their attitudes toward the role of corporal punishment in our schools today. His results might be surprising and provocative to many.

In surveying the literature on discipline Worona points out that since "no plan of discipline is a complete, infallible package", it is necessary to have "alternate strategies in reserve". His sixteen specific suggestions are to "provide teachers and/or administrators with a few practical avenues of approach in dealing with classroom/school management".

INSERVICE

"What and how do you teach teachers?", was the topic of the last session in which Carol Ramberan provides a model for teachers of high school English while Al Shynal reports the results of a survey of perceptions of Ontario educators regarding the importance of and need for training in selected curriculum process skills.

Dealing with the "confusion among high school English teachers about exactly what to teach and how and when to

teach it" Ramberan expands "on a concern based framework for teacher professional development" and identifies and growth-strands some important learning. It is her contention that inservice sessions planned to meet the expressed concerns of teachers would likely be incorporated into the teachers' curriculum planning.

Al Shynal's survey developed because "boards of education have assumed greater responsibility for interpreting the broad policy statements within the curriculum guidelines issued by the Ministry of Education" and thus have a growing interest to develop curriculum leadership skills. His paper contains the result of his survey and the general objectives of a program in curriculum processes.

WRAP-UP

Chairman Allan C. Bennett's paper "New Directions in Graduate Education" concludes these proceedings. In this final paper he presents a brief overview of recent events in the M.Ed program and looks ahead to future possibilities. His emphasis on the quality of educative experiences provided in the M.Ed program and his candid remarks about what is probable and what is not, show that education is not on the decline at Brock.

FINAL COMMENT

Just as the purpose of the introduction is to invite you to read the papers, the purpose of the papers is to invite you to read the completed projects and theses. By paying serious attention to our graduates' research, you will have professionally honored them.

We would be remiss in this introduction if we did not offer a final thanks to all who made this occasion a very special day. Thank you graduates, faculty, staff and participants. You came, you saw, you participated, you celebrated.

RESEARCH IN A GRADUATE EDUCATION PROGRAM

Dean Peter J. Atherton

Very often discussions about the content of Graduate programs focus around the question of the emphasis on theory or practice. Whilst this is an ongoing concern it does, I believe, tend to cloud the major issue. To begin with discussions of whether the emphasis should be on theory or practice contributes to the false notion of a theory/practice dichotomy.

Too ready an acceptance of this dichotomy leads to the setting up of "practical" courses which have all too often a content consisting of lectures from "experts" telling students "how I do it" or readings from experts, usually too far away or too expensive to bring in as guests, telling us "how I do it". On the other hand, this easy acceptance of the emphasis in theory can lead to the design of graduate courses in which the instructor almost takes pains to avoid any possibility of being charged with the accusation that the content may have useful application.

Further discussion of the theory-practice controversy frequently leads to the resolution along the lines that one should consciously deal with the theory underlining the practices and/or the alternative that one must deal with the practice associated with the theory. I would suggest that in spite of the neat semantic aspect of the definitions they do not help us identify the significant characteristics of graduate work. After all, both definitions suggest that theory and practice are both essential components of graduate work.

I would prefer to look at the characteristics of a Graduate program in another way. What do we expect from someone who completes an M.Ed. program? Certainly we would expect our graduate to demonstrate improved performance on the job. But aren't these the characteristics we might rightfully expect from any student taking courses in a professional program whether for degree credit or not? It seems to me that the major difference that may be expected from a good undergraduate and a good graduate student is the ability to solve problems in the light of available knowledge and where knowledge does not exist -- to create it. The process by which the new knowledge is established we call research. In short I would argue that the chief

characteristic of a good Graduate program is its emphasis on, and the opportunities for , research.

I believe it is regrettable that discussions of research in education have become so highly associated with the technical aspects of conducting research and the sometimes conflicting outcomes which result from technical differences that we have tended to lose sight of the purpose of research.

We might begin by reminding ourselves that research is essentially that process of study or inquiry by means of which we seek objective truth or reality. It is this common concern with the search for truth or reality that binds together the highly diverse disciplines within the university. The methods of study or enquiry may be as diverse as the disciplines. For some, research is an activity pursued in libraries or archives, for others, research is an activity which takes place in a department store or a classroom through the observation of behaviour.

In the context of a Graduate program then, we may say that research is the process by means of which we examine problems in education, whether they be more theoretical, which we call basic research, or more practical in orientation, frequently called applied research, research and development or action research. Research activities should be demanded in all Graduate programs in all courses.

However, the emphasis on research in our M.Ed. Program is nowhere more apparent then in our requirement of a final thesis or project. Today's conference presentations will attest to the value of this requirement. I suspect without the requirement some of the excellent research reports which you are about to hear today would not have been written.

The stress on research in a Graduate program has, however, implications beyond those associated with developing a wider understanding of relationships or the solution of classroom problems and I would,in closing, like to comment on these.

We are today, more than ever before, concerned with the concept of professionalism. For too many the issue focusses on control over entry to the profession and the acquisition of status. I believe this is the wrong emphasis. After all status is an ascribed quality. Whilst it is important to develop a self-concept of professionalism, the real issue is not how we regard our professionalism but how others do. Furthermore, many craft unions exercise tight control over entry and memberships without being the least concerned with professionalism.

Surely the real question in professionalism is the bases on which decisions affecting the clients are made. How many

decisions are made in education on the grounds of political expedience, bureaucratic authority or honoured custom? How closely does the nature of timetabling follow what we know about how children learn? How closely do patterns of motivation follow what we have discovered about why people act the way they do? Upon what basis are the recommendations of S.E.R.P. based?

The bases for professional decision-making in medicine are research oriented. Can we say the same in Education? Regrettably no. Without research, one man's opinion is as good as another's. Without research evidence as to the appropriateness of this method or that technique, we may fall victim to glib charlatans with an axe to grind or a system to sell.

Experience in the conduct of research, whether it be as a consumer or as one who conducts research, is the key to the ability to distinguish the true from the false. Each presentation you will hear today has the twin function of contributing to truth and knowledge and the striving for a more rational basis of decision-making.

LANGUAGE EXPERIENCE OR TEXT?

AN EXPERIMENTAL STUDY

Suzanne M. Nolan

The Purpose of the Study

Despite the widespread use of the Language Experience approach to teach beginning reading, there is little in the way of solid, empirical evidence to support the enthusiastic claims made by classroom teachers. This study was conducted to compare Language Experience with text methods in order to learn more about the perceptual process and its relation to beginners and remedial readers.

Language Experience - The Background

Language experience attempts to build on the oral language ability and life experiences of the child. Through integration of personal vocabularies and experiences, the child's level of motivation and learning is said to be increased because he is dealing with things that are familiar to him. Many theorists have supported the approach because of its emphasis on personal meaning and relevance.

The work of Sylvia Ashton-Warner and her version of the approach in particular provided the early seeds of interest for the current study. She believed that in order for a young child to make progress in the initial stages of reading, the basic sight vocabulary had to come from the child himself. She argued that these "first words" are "key words" and as such have intense meaning for the child. To try and teach reading using vocabulary and concepts that do not relate to the child's experience was futile according to Ashton-Warner.

The Generation Effect

Recently work has been done which, although not directly related to young children or the reading process, would seem to confirm Ashton-Warner's beliefs. Slameka and Graf

(1978,1980) conducted intensive research to compare memory for subject produced words with memory for experimenter produced words. In all cases, performance was superior when the subject generated part of the content himself. The phenomenon was robust in that it manifested itself across a variety of testing procedures, encoding rules and other situational changes. Slameka and Graf called the superiority of the memory phenomenon "the Generation Effect".

Related Research

Since the initial work done by Slameka and Graf, other researchers have conducted studies which have verified the existence of the generation effect. McFarland, Frey and Rhodes (1980) studied the mnemonic value of internal stimulus generation. Their results indicated that internal generation of stimulus words consistently induced higher levels of memory performance than did encoding experimenter generated words. Similarly, Raye, Johnson and Taylor (1980) concluded that subjects were more sensitive to the relative frequency of internally generated events. These studies and others (Jacoby, 1978) done to investigate generation effect consistently involved adult subjects and were not conducted in a controlled classroom setting.

A very limited number of controlled studies have been undertaken with children to investigate the Language Experience approach in particular. One study, conducted by Reifman, Pascarella and Larson (1981), was designed to examine the effects of word bank instruction on subject's sight word acquisition. Another study by Noble (1981) investigated the role that self-selection plays in reading. Both studies indicated that beneficial results could be obtained through the use of language experience and self-selection. However, neither study tried to explain why self-selection produces such positive results other than through increased interest and motivation. Nor did they investigate the role that perception or cognition plays in learning to read.

An Information Processing Model

An information processing model produced by LaBerge and Samuels (1974) may help to explain some of the positive results that have been attributed to the generation process as we see it in the language experience context. Briefly, their theory states that attention can be directed to only one component of the reading process at once. It may be directed at comprehension or at decoding. In reading new or unfamiliar material, the reader can focus on decoding or on comprehension not on both at the same time. However, a

fluent reader or one who is working with familiar material can switch his attention from decoding to comprehension quickly enough to result in accurate reading and understanding.

The model has direct implications for what happens when a child learns to read using self-generated material. If the child is focusing on a story that he himself has written, it follows that the content will be familiar and meaningful. If LaBerge and Samuels are correct the reader may then be able to focus on decoding the individual words since he already comprehends the meaning. It may be that the beginner can focus his attention on the visual information required in the reading process, thereby encoding and storing more of this type of information than otherwise might be the case. Thus, the perceptual learning associated with self-generated language experience vocabulary should be superior to the perceptual learning associated with text based vocabulary.

The Experimental Procedures

Hypothesis

It was hypothesized that a disabled or remedial reader would perform better on a recognition test of new "pseudo-words" learned in a language experience condition than he would on a recognition test of new "Pseudo-words" learned in a text condition.

Subjects

The subjects were a group of twenty-five Grade Two students chosen from two Hamilton schools. All of the children were achieving below-average results in reading.

The Design

The design of the experiment was that of a single-factor with repeated measures. Each subject received both testing conditions. To control for possible experimenter bias and carry-over from one treatment to the other, the conditions were counterbalanced.

The Stimuli

The stimuli for the test consisted of seven pseudo-words in the language experience condition and seven in the text condition. Different words were used for each condition. Two of the pseudo-words in each set were distractors. They were introduced during the recognition test. Each stimulus

word consisted of three letters in a consonant, vowel, consonant pattern (e.g. bec, sig, jev, bof, min). The distractor words were similar but varied by one letter (e.g. sig-sif, ris-ril). The words were presented on three by five inch cards.

The Method

In the language experience condition, the child was asked to think about and name his favourite toy. After a name was given by the student a pseudo-word was presented. The student was asked to look at the pseudo-word and try to remember the toy that it represented. In the text condition, the experimenter generated the toy names for each pseudo-word and presented them to the student. Again the student was asked to remember the toy that the pseudo-word represented. The initial presentation phase was followed by a brief rehearsal period and then a break for the student.

The recognition test involved the presentation of the pseudo-words and the distractor words in random order for both conditions. The child was not told that the distractors were included. His task was to identify each word on presentation. It was hypothesized that the child would be able to identify the distractors in the language experience condition and indicate that they were not part of the initial set of words.

Statistical Analysis

The comparison of the language experience and text conditions was accomplished using a paired t-test and a repeated measures analysis of variance. A secondary goal was to investigate the relationship between performance in the language experience or text conditions and previously recorded achievement in the Gates-MacGinitie Reading Test. This was done by calculating the (Pearson Product Moment) correlation coefficient for each of the conditions and the Gates-MacGinitie test scores.

The Results

The experimental results indicate that substantial differences exist when students' performance in the language experience condition are compared to their performance in the text condition. For all statistical analysis a .01 level of significance was used. The performance of each student in recognizing the distractor words under the two conditions being studied provided a truly correlated data pair. With the 25 such pairs provided by the experiment the direct difference method was used to determine a t-ratio. A highly significant difference between the students' performance under the two conditions was evidenced by a value of ($t=3.374$, p less than .01).

The examination of the extent to which performance in the Gates-MacGinitie test was related to the effectiveness of either the Language Experience approach or the text method did not reveal any significant correlation.

Discussion

These strong results associated with visual recognition memory suggest that young, disabled readers appear to learn more about the visual features of words when they are self-generated as opposed to teacher supplied. This superior learning may result when the student is not faced with the task of constantly switching his attention between decoding and comprehension. When meaning is known, attention can be directed to decoding alone. Since beginners and remedial readers possess ineffective attention switching and decoding skills, reading methods that reduce these requirements should result in better achievement.

In conclusion, if a child can bring his own language to the learning task, the amount learned in a component skill may actually be increased because the amount to be learned is decreased. Therefore, when a child works with his own language and can generate part of the content himself, it should be easier for him to build vocabulary, make sense of letter-sound relationships, understand mediated word meaning and develop increased word identification.

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TEXTBOOK OR LANGUAGE EXPERIENCE? AN EXPERIMENTAL STUDY TEACHING WORDS IN ISOLATION AND IN CONTEXT

D.G. White

Although the language experience method for the teaching of reading is in widespread use, there is little empirical evidence to support its superiority as a method of instruction.

This study was conducted to learn more about the reading process and its relation to beginning reading. The "generation effect" labelled by Slameka and Graf (1978) and the LaBerge and Samuels (1974) model for reading formed the theoretical basis for the experiments.

Experiments conducted by Slameka and Graf (1980) revealed that across a variety of testing procedures memory was superior for subject generated words. Since language experience instruction depends upon subject generated words, it was hypothesized that memory for words learned from language experience should be superior to those learned from textual instruction.

The LaBerge-Samuels (1974) model for reading is an information processing model in which the role that internal attention plays is central. Attention is distinguished by the three characteristics of alertness, selectivity and limited capacity. In addition it is assumed in the theory that getting meaning from the printed word involves a two-step process of decoding and comprehension. Since attention can only be directed at one element at a time, the beginning reader needs to switch back and forth from decoding to comprehension. For the beginning reader this process is slow and laborious. In language experience, since the material is the reader's own and comprehension is present, the need to switch back and forth should be eliminated and attention can thus be directed to decoding.

The purpose of the first experiment was to replicate an earlier experiment conducted by Nolan (1982) in which she hypothesized that the beginning reader with problems would achieve better results on a word recognition test after receiving language experienced based instruction than he would after being taught with textual methods. The

hypothesis is based on the premise that the young child or beginning reader can focus his attention on the perceptual learning components of learning to read in a language experience condition.

The subjects for this experiment were twenty-six grade two students enrolled in a regular classroom. The stimuli for the test consisted of seven pseudo words presented in each of the language experience and texts condition. During the recognition test two of the pseudo words were replaced with distractor words.

A single factor design was employed using a repeated measure. Each subject received both treatment conditions administered in random order. This design offered advantages in that control was in place for homogeneous subjects thus an observed difference in response should be the result of the treatment conditions alone.

In the text part of the test the examiner presented pseudo words and told the child the meaning of each word. In the language experience condition the child was asked a word which he would like to learn and then presented with the pseudo word on a card and told that this was what the word looked like in the "new language".

After a rehearsal period, the child was tested on five of the seven words and two distractor words. Analysis of the test results indicated that the subjects recognized significantly more distractors in the language experience condition than in the text condition. The results support those obtained by Nolan (1982).

Noting the inadequacy of the first experiment in that words were both taught and tested in isolation, a second experiment was conducted. In the second experiment the same subjects and a similar method was used. The distractors however were tested in context.

Earlier work by Samuels (1970) Garnar (1977) and Smith (1971, 1973) suggested that in a context situation less visual information would be used by the reader. Further to this, experiments by Kolers (1966) and Cohen (1970) led to the hypothesis for the second experiment that there would be no significant difference in the recognition of pseudo words learned in context from instruction based on the text approach to that of the language experience approach.

The stimuli for the text method consisted of language samples from these grade two students which was recorded. One of the words in each sentence was substituted for a pseudo word to which the child was given the meaning. In the language experience condition the child dictated sentences to the experimenter. One of the words in the sentence was substituted for a pseudo word.

In the test situation five of the learned pseudo words were used and two new distractor words were added. The results were analysed using a paired t-test.

The results of the second part of the study support the hypothesis as stated. The results in the second part were in direct contrast to part one. In a context situation the advantage of the generation effect is lost to the effects of context as was predicted from the research (Cohen, 1970; Gibson and Lewis, 1975; Kolers, 1966; Smith, 1971, 1973, 1975).

Since most teaching of reading should be done in the context or sentences, the results of the second experiment fail to conclusively favour one method of instruction over another, namely text or language experience.

In examining both experiments, certainly when dealing with words in isolation, there is evidence to support language experience and reap the benefits of the "generation effect". In context teaching, one method appears to be as effective as the other. If our purpose is to teach feature learning this is best taught when words are presented in isolation.

Further Research

As both experiments are considered it would appear that different factors contribute to the rate of success in reading achievement. In order to isolate the generation effect over the effect of context this study needs to be carried a further step by controlling for the effect of context and alternate the teaching and testing methods between context and list.

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PROMOTING POSITIVE SELF-CONCEPT IN STUDENTS THROUGH THE PHYSICAL EDUCATION PROGRAM: A HANDBOOK FOR TEACHERS

Susan E. Kalbfleisch

Research supports the theory that a positive self-concept can lead to academic achievement and that a positive self-concept can be enhanced through a Physical Education program. This paper summarizes a handbook which endeavours to assist Physical educators to enhance the self-concept of students by providing teaching strategies, activities, games, lesson plans, and evaluation methods. By providing an inviting environment and by meeting individual needs, students can grow as able, valuable and responsible persons and achieve success physically, socially, emotionally and intellectually.

Essentially, the handbook is based on theory and practice as put forward by William Purkey (Self Concept and School Achievement, (1970) and Inviting School Success, (1978) and Donald Hellison (Humanistic Physical Education, 1973). Purkey emphasizes that a student's subjective and personal self-evaluation is a dominant influence on his success in school. He also describes methods for inviting students to see themselves as valuable, able and self-directing and to encourage them to act in accordance with these positive self-perceptions. Hellison discusses self-esteem, self-actualization, self-understanding, and inter-personal relationships in the physical education program. He goes on to say that in order to enhance self-esteem in a physical education setting at least three conditions are necessary: a non-threatening environment, treatment of each student as a unique and special individual, and opportunities for success.

This handbook has been developed with the teacher and student (particularly in grades six to eight) in mind. It endeavours to assist teachers in the enhancement of their students' self-concept through teaching strategies, activities, games, lesson planning and evaluation methods for the teacher, student, and program. The stress in the physical education curriculum should be on meeting the needs of all students, not strictly the "athletic" ones, thus an emphasis on participation, self-improvement (not based on group norms), enjoyment of physical activity (hopefully to carry over into the area of education for

leisure), values (such as playing the game for the game's sake) and good sportsmanship, consideration for self and others, self-respect, responsibility, and the like.

Chapter One includes a review of the literature, rationale, and a brief annotated bibliography of selected sources.

Chapter Two explains, as an overview, the instructional physical education program (that is, daily physical education class sessions). Included are general concepts related to individualizing aspects of the total program, "inviting" approaches and suggestions of organizational methods to assist in comprehensive planning.

Chapter Three focuses on "games" in the instructional program. The author assumes that an instructor using this handbook understands basic technique in games/skill areas (that is, the set shot in basketball, serving in volleyball, etc.). The emphasis of the chapter instead is to develop skills and use games in a success-oriented and inviting way. Activities, low organizational games, equipment modification, creative games and co-operative games are some of the many suggestions presented.

Chapter Four explores gymnastics in the instructional program. The author presents a case for a "movement approach" to gymnastics followed by carefully introduced components of "Olympic" gymnastics. A philosophy and rationale is presented as well as general concepts, use of equipment, class/unit organization, suggested lesson topics, and a sample teaching unit (consisting of nine, fifty minute lessons based on the previous rationale and suggestions).

Chapter Five provides information on the instructional program in the area of dance--folk dance, modern dance and creative dance. The focus in this chapter reflects the perceived need for teachers to enjoy dance <u>with</u> their students. In the area of folk dance, instructions usually accompany the record. Many teachers, the author felt, are uncomfortable teaching in this area. Those who can dance and understand the instructions may be unsure as to appropriate teaching methods, particularly, using methods which will invite student participation and enjoyment. The focus is on methodology and teaching progressions to that end. The creative and modern dance sections explore how a teacher can work with students to create dance.

Chapter Six discusses fitness-related aspects of physical education in a specific way. Activities are presented in which specific components of fitness are stressed (flexibility, strength, endurance, cardiovascular) in a positive and inviting way. Circuits, running activities, rope jumping, dance fitness, are some suggestions.

Chapter Seven investigates the co-curricular program

(intramurals, extramurals, coaching) as it enhances the instructional program.

Chapter Eight briefly discusses evaluation of a physical education program--lessons, teaching methods, student progress and the total program.

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A GUIDE FOR THE ELEMENTARY SCHOOL TEACHER-COACH

P.R. Morgan

"A Guide for the Elementary School Teacher-Coach" is a handbook designed to encourage elementary school teachers to become involved in their school's interscholastic sports program as coaches. The assumption is made that while relatively few teachers actually accept the role as teacher-coach, many others would unselfishly give of their time in this role if they felt more confident and competent in the coaching situation. A parallel is drawn between the activities of coaching and teaching in an attempt to bring the reader to the realization that the activities and skills required of a classroom teacher are the same practices and talents which are fundamental to sound coaching. The handbook is not intended to be a complete coaching manual.

Review of Literature

The actual handbook for the teacher-coach is preceeded by an examination of the coaching activity. A review of recent literature regarding motor learning and skill acquisition, and from sport psychology serves as a basis for the author's beliefs. These areas are highlighted in the following paragraphs.

The importance of the coach understanding how motor skills are developed is obvious. The paper touches on the simplistic stimulus-response theory of Pavlov (Singer, 1972) to the more complex and now more accepted theories of Welford, Whiting and Robb. These more recent approaches are graphically explained and discussed in the text. A cumulative model of motor skill acquisition would indicate that the athlete utilizes three basic systems or mechanisms when learning a skill: receptors, which receive the sensory stimuli from the environment; processors, which translate and code this information preparing the desired response; and effectors, or musculature which performs the act. Feedback is an important element of this more recent view of motor learning, providing return data to the receptors to allow for adjustments or to confirm the action performed.

Two significant implications are indicated by this process

for the coach. The first is that motor skill acquisition is NOT merely a physical development but relies greatly on the mental processes involved. Understanding how general learning takes place is of great value. It would be reasonable then to suggest that the teacher-coach would be able to utilize his teaching skills and assist the athlete greatly in clearly perceiving the skill to be mastered. In addition, the teacher's professional ability to provide accurate and positive feedback in response to the behaviours of his students indicates that he would be able to do the same in a physical setting and thereby be of great value as coach. Secondly, the uniqueness of individuals and their development, a fact that the classroom teacher is all too well aware, is key in motor skill acquisition. The ability of the coach to adjust and individualize his instruction is vital if development is to be maximized. The classroom teacher, of all people, is accustomed to operating in this difficult teaching environment.

Sport psychology, as a discipline, is relatively new. But, even in its infancy, has identified key concepts involved in coaching which are particularly pertinent to the teacher-coach. The first, and perhaps most basic, is in defining the term "coach". Sport psychologists appear in agreement that the role of a coach is a complex one involving a multiplicity of roles such as leader, instructor, counsellor, model, decision maker, communicator, and so on. Teachers certainly can empathize with this demanding role for perhaps only their own can match it for complexity. One can not fail to be struck by the obvious similarity between this role and that of the teacher. Psychologists have also noticed this significant relationship and some even flatly state that "coaching is teaching" (Tutko & Richards, 1971). This realization has also been made by coaches themselves such as John Wooden, UCLA basketball, who has stated his belief that "good coaching is similar to good teaching at all levels" (Cratty, 1973).

The sport psychology section of the literature review also briefly discusses coaching personality, intelligence, expertise, practising, and teaching techniques. In every one of these areas the teacher will discover that sports psychologists envision a very strong correlation between what are desirable qualities and practices for coaches to those vital to the teacher in the daily performance of his teaching duties.

The Handbook

The actual handbook is written in precise terms. It makes no secret that its sole purpose is to convince the classroom teacher that he/she has the important skills and knowledge to become a valuable contributor to the

interscholastic program as a coach and that any concerns regarding inadequacy are unnecessary.

Chapter one deals with the coach's role and the desirable coaching personality. It reiterates what sport psychologists have found with regard to these areas and stresses the similarities between successful coaches and successful teachers. One particularly important aspect which causes classroom teachers to hesitate in accepting the role of teacher-coach is their perception of the importance of technical knowledge of the sport to be coached. Surprisingly, sports psychologists have determined that technical mastery of a sport is NOT a prerequisite, even among world-class athletes, for a "good" coach (Singer, 1972). With this being the case, the generalist nature of the elementary teacher should allow him to attain or research whatever technical knowledge may be necessary for coaching at the elementary level. The author includes a list of resources for a number of sports to which the teacher-coach may refer in planning his team's practices and program.

Chapter two examines the process of teaching skills and parallels the process from the coaching and teaching viewpoints. It develops the following six step process which the classroom teacher has great familiarity because of its general applicability to the classroom:

(1) Examine the game.
(2) Identify the fundamental skills needed to play.
(3) Break down the skills into smaller teaching points.
(4) Develop a progression of experiences requiring the skill, beginning with the simple and moving to the complex.
(5) Challenge but not frustrate the athlete through drills.
(6) Provide the necessary feedback to allow for continued development.

Chapter three focuses on the practice situation by providing a series of guidelines for the teacher-coach. Among these are: the necessity for planning the practice session; the needed qualities of flexibility and variety; the importance of clear, precise, and short instructions; and the concept of specificity of practice. The first three of these are obviously also key elements for successful teaching. The fourth, because of its special application to the coaching situation is dealt with in considerably more detail. It is notable however, that the concept of specificity of practice has been derived for coaches from models of learning theory. This chapter concludes with a brief discussion of considerations for "fun games" and drills which bears a striking similarity to the use of these in a classroom situation.

Chapter four briefly discusses two areas that deserve contemplation by any coach. The first being the development of a personal coaching philosophy. The second pointing to the tremendous potential influence that a coach can have on his athletes, regardless of their ages. The teacher-coach will have no problem identifying with the concept of a philosophy. Two key questions are introduced that need to be considered in establishing such a philosophy.

1. How do I view "success as a teacher-coach?"
2. " Where do I stand on the question of winning and losing?"

Teachers must be impressed by the fact that coaches are second in terms of influencing children, only to be superceded by parents. With teachers being third in this list, the potential influence that a teacher-coach may exert may be incredibly high. Certainly this one fact alone should serve to indicate that the addition of coach to our already multi-faceted role could add a dimension which might reap major benefits.

The final chapter of the handbook reiterates the author's view that teachers need not fear the role of teacher-coach, since they already possess the skills necessary to be successful in this dual role. Coaching is teaching. All that is needed is the inclination to give it a try.

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MEETING THE NEEDS OF CHILDREN FROM BROKEN HOMES

Nancy Bufalino

The one parent family constitutes a significant minority in our country. Statistics show that in the last decade, the number of one parent families rose nearly eighty percent.

About twenty percent of the children in our schools today come from one parent homes. The percentages continue to rise each year. Projections indicate a rise to forty percent or more by the end of this decade.

The growing number of these children necessitates a greater awareness on the part of educators to their special needs.

Separation and divorce are traumatic experiences which cause stress and anxiety for the adults involved. Perhaps more than their parents, children too, suffer insecurity and anxiety at this time. They are ill-equipped to understand and cope with the multitude of feelings and changes this trauma engenders. These emotions surely carry over to the classroom.

Problems may be noticed in the child's grades or participation in activities or discussions, his behaviour with his peers, his health, his attitudes towards himself and others.

It is at this time that the teacher should lend sympathetic support. It seems, however, that instead, teachers tend to attach labels to these children.

In the staff room, it is not uncommon to hear, "Oh well! He's from a broken home!" This label implies a gloomy future for the child. Because he is from a broken home, he is thought of as less capable, less trustworthy and less "educable". We cannot afford to label and stigmatize one fifth of our school population.

WHAT SCHOOLS CAN DO TO HELP THE CHILD FROM THE BROKEN HOME

A. THE TEACHER'S ROLE:

During a time when a child's life is becoming undone, he

needs to know that he has a friendly and sympathetic ally in the teacher. The importance of the teacher's attitude is immeasurable.

Teachers should take the time to read about separation and divorce, or request professional development days during which psychologists or other professionals might lecture on the effects of this trauma on children.

They should learn to recognize the symptoms of child stress. These could include absentmindedness, daydreaming, lethargy, moodiness, increased aggression, anxiety or withdrawal. Academic achievement might also be suffering at this time, since concentration may be poor.

An interview with the parent, when these symptoms are noted, may reveal the problem to both the parent, who may be so caught up in her own problem that she is not aware of the child's problems and to the teacher. This should result in a co-operative effort to remove pressure from the child and to assist him in an empathetic manner.

The principal should lead the teachers in an examination of their attitudes towards children from broken homes. Since the principal is the chief creator of the educational climate of the school, it will be up to her to maintain a fair, non judgmental attitude toward one parent families and their children, and to guide her teachers to reflect this same positive attitude.

A supportive and positive attitude by the teacher will encourage a child to feel positive about herself.

B. CURRICULUM:

Teachers can have an impact on the curricula used in their school. Curricula should include references to all types of family situations - one and two parent families, step-parents and so on. Each family should be respected and have value.

C. READING MATERIALS:

Texts and library books should offer children of all ages a chance to read about separation and divorce. For the child from the broken home, it is an opportunity to see that other children have gone through the same feelings and traumas. Children from intact homes might read these books and feel a little empathy for the children from broken homes.

Books which list divorce and separation terms such as child support, alimony, and custody hearings should be available for children who have heard these terms used, but who may be too anxious to ask about them.

An excellent annotated bibliography is available from Parents Without Partners.

D. ACCOMMODATING THE ONE PARENT FAMILY AND CHILD:

Schools should arrange evening activities so that working parents may attend.

Teachers should be aware of agencies in the local community that offer help and guidance to the single parent.

Teachers should be sensitive to the problems aand conflicts caused by functions such as "Mother-Daughter" banquets, or activities such as making Father's Day cards.

Financial problems may plague single parents, so that activities involving money should be limited, as should activities such as "dress up" days. These place unnecessary burdens on the parent and may tend to single out or embarrass the child.

E. COUNSELLING:

If numbers warrant, counselling groups might be set up to allow children to discuss feelings and problems with peer groups who are experiencing similar feelings and troubles. The school might function as a catalyst in the creation of a single parent group. Speakers from various agencies and services might provide assistance to the group. The child will ultimately benefit through the parent's increased understanding and effectiveness.

F. MALE TEACHERS:

Since it is most often the mother who is the custodial parent, children, particularly boys, lack a "father figure". They might benefit from the more obvious presence of male teachers in the primary and junior grades. Positive contact with male administrators might also be beneficial.

G. SCHOOL RECORDS:

School records should be open to both parents and interviews should be held with parents if possible. Parents should know that disclosures of a personal nature will remain strictly confidential.

G. AFTER SCHOOL CARE:

After school programs such as intramural sports or interest

electives would benefit all children, particularly those from broken homes. These would ensure their safety and eliminate much of the unsupervised time between the end of school and the parent's arrival from work.

Realizing that fully one-half of our students in this decade may be living in a single parent home, we must act now to do all that we can to meet this challenge.

Schools will have to adapt their programs and methods to ensure that each child is educated to his full potential.

As the number of single parent families grows, the sense of difference the child feels will be diminished. This may negate some of the difficulties that the child from the broken home experiences. However, the psychological effects of this trauma, and its manifestation in the classroom will continue. By becoming aware, and being willing to help, we may guide and support these children through their crises and help them to regain their confidence and self esteem.

Educators can help children realize that this change in their lives can be positive. We can encourage the child to see himself and his family in a positive way. If we can encourage this attitude, we can benefit the child and his educational opportunity.

Further research is necessary into the effects of a child's home life on his education. If the psychological effects of separation and divorce are so great, what effect must there be on a child living in an unhappy intact home? Perhaps an "emotional divorce" (i.e., parents who are emotionally removed from each other, but who remain together for the "sake of the children") can be far more damaging to a child since he is constantly exposed to arguments, perhaps even violence.

A child who is reared in a family where there has never been a marriage would face a wholly different set of problems. How would this child's academic future be affected?

Educators must adapt to the changes that are prevalent in our society. The complex issues which affect education must be met by teachers who are well trained, adaptable, and compassionate. A deep concern for the welfare of children should be uppermost in the minds of the teachers of the eighties.

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TEACHER STRESS AND BURNOUT:
THE CASE OF SECONDARY SCHOOL SCIENCE TEACHERS

Paul Devilliers

The purpose of this project was to investigate "stress and burnout" in the case of secondary school science teachers in Ontario

In assessing the prevalence and sources of teacher stress, it was necessary to replicate previous studies done at the elementary and secondary school levels by Kiriacou and Sutcliffe (1978) and Nash and Allyn (1980). In measuring burnout, the Maslach Burnout Inventory (MBI) was used (Maslach and Jackson, 1980). This study was done, however, at a much smaller scale.

To investigate the prevalence and sources of teacher stress, a questionnaire survey was given to secondary school science teachers from seven high schools in Ontario.

Fifty percent of the science teachers perceived their profession as either very stressful or extremely stressful. Except for the variable sex which was not investigated, results indicated that there was no significant difference in scores due to level of experience or position held in school. To determine the magnitude of stressful events, a rating scale similar to that of Kiriacou and Sutcliffe (1978) was used. Findings indicate that secondary school science teachers are extremely concerned about events dealing with job security to the point that it induces excessive stress. Events related to the theme of "managing children" were rated second on the priority list, while "problems with time" was rated third.

Results on stress were compared with studies made by Kiriacou and Sutcliffe (1978) and Cichon and Koff (1978). For the case of secondary school science teachers, the number and types of clusters of stressful events as well as the rank-ordering of those clusters were different from those obtained by Cichon and Koff in 1978. One important difference between Kiriacou and Sutcliffe's studies on teacher stress and this study is the presence of the factor "job security" which emerges as the factor inducing the most stress in the case of secondary school science teachers. This factor was not present in studies made by Kiriacou and Sutcliffe in 1978. Also, findings seem to indicate that secondary school science teachers are

subjected to additional stressors such as worrying about safety in the laboratory and spending extra time to prepare equipment and chemicals.

In measuring burnout for the case of secondary school science teachers, twenty-five items of the Maslach Burnout Inventory were used. Based on Maslach's method, those items were grouped into four factors: emotional exhaustion, depersonalization, personal accomplishment, and personal involvement. In analyzing the data, the last factor was not used because its reliability was not thoroughly tested by the authors. Results on burnout indicate that secondary school science teachers in Ontario suffer from the "initial phase" of the burnout syndrome - that of increased physical and emotional exhaustion paired with some aspects of depersonalization toward the students. On the Emotional Exhaustion subscale, scores with significantly higher mean ratings, on both frequency and intensity dimensions, were items describing attitudes and feelings such as: "I feel used up at the end of the workday", "working directly with students all day is really a strain for me", "I feel emotionally drained from my work", and "I feel frustrated by my job". On the Depersonalization subscale, the following items had high mean ratings: "I've become more callous toward students since I took this job", "I feel I treat some students in a rather impersonal manner compared to when I first started teaching", and "I worry that this job is hardening me emotionally". This suggests that secondary school science teachers feel that they are treating their clients (students) in a rather impersonal manner compared to when they first started teaching. On the frequency and intensity scales, those feelings of depersonalization are experienced "about once a week" and with "moderate intensity".

In this study results on burnout for the total sample were similar in pattern to those obtained by Maslach and Jackson in 1980. Both scored highest on the Personal Accomplishment subscale. In both studies, the next highest mean score was obtained on the Emotional Exhaustion subscale, while the lowest mean score was obtained on the Depersonalization subscale. The frequency and intensity dimensions of each item were found to be positively correlated in both studies.

Research Issues

The study of stress among secondary school science teachers revealed that there was no significant difference in scores attributed to level of experience or position held in school. The variable sex was not investigated because the sample contained too few females (N = 2) for adequate comparison. Further investigations, using a larger sample, may be conducted to examine the difference between these variables.

A second area of research would be to conduct a similar study, using the same items, to investigate stress and burnout for the case of elementary school science teachers in Ontario. Would the results on the number and types of clusters of stressful events as well as the rank-ordering be the same? Would elementary school science teachers show the same symptoms of burnout?

A third area of research would be to use the Maslach Burnout Inventory to investigate burnout for the case of secondary school teachers who are not teaching science. Then their scores may be compared with those obtained for secondary school science teachers to find out if they are really experiencing a significantly "different" situation.

Concerning burnout, in this project, only the total mean scores of the samples were compared with those of Maslach and Jackson (1980). No attempt was made to break down the scores on burnout, in the case of secondary school science teachers, into their biographical components. Further investigations, using a larger sample, may be conducted to examine the differences between these variables.

Another area of research which may be worth investigating is whether scores would be different if the questionnaires were given to the teachers at a different time during the school year. For example, if teachers felt generally more tired or more depressed during winter just before the Christmas holidays, would their perceptions of stress be different? This is certainly worth investigating. In fact, two colleagues to whom I gave the questionnaires on stress and burnout, suggested that they would have probably scored differently if they were to fill those questionnaires before the Christmas holidays. Further investigations may be conducted to find out if time is a significant variable.

Recently, Freudenberger (1980) designed "The Burnout Scale" which consists of a simple questionnaire to measure burnout. It would be interesting to conduct simultaneously (to eliminate the variable time) two independent studies to investigate teacher burnout using Freudenberger's method and the Maslach Burnout Scale and then compare both results.

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A CORRELATION STUDY ON LIFE STRESS AND TEACHER STRESS

I. Massouh

Everone has experienced stress, good or bad, but many teachers are showing symptoms of burnout. Is it only due to job-related causes?

The purpose of this project was to investigate the relationships between teacher stress and life events stress, and also to compare stress experience by teachers from French and English schools.

Doing this research implied the replication of previous work done by Holmes and Rahe (1967) for the Social Readjustment Rating Scale (S.R.R.S.), and by Cichon and Koff (1978) for the Teaching Events Stress Inventory (T.E.S.I.). This study was done however, at a much smaller scale. These two tests were given to teachers in two types of schools in Ontario, one French and one English. The T.E.S.I., was used to measure the degree of stress caused by thirty-six events associated with the teaching profession. The S.R.R.S., was used to measure the degree of stress associated with forty-three life events.

The rank-ordering of life events, revealed that the magnitude of stress for the teachers studied in Ontario was comparable to the original study, with a rank-order variation of ± 4. The highest-ranking stressors of both studies were: death of spouse, divorce, marital separation, fired at work, death of a close family member, personal injury or illness and jail term. Some events, such as death of a close friend, trouble with the boss, and change in schools were ranked much higher in this study.

The rank-ordering of the teaching events revealed some differences with the original study in the overall ranking of the events. The results were comparable however, when general themes or clusters of events were considered. The cluster which was assigned a high level of stress, and called therefore "priority concerns", included such events as threatened with personal injury, colleague assaulted in school, target of verbal abuse by student and managing disruptive students. The second cluster included events that concern the theme "management tension". It includes such events as involuntary transfer, notice of unsatisfactory performance, denial of promotion or

advancement, disagreement with supervisor and overcrowded classroom. The next cluster included events related to professional competency, such as maintaining self control when angry, and teaching students who are "below average" in achievement level. The lowest ranked events were found to belong to "pedagogical functions", such as teacher parent conferences, dealing with bilingual students, discussion of children's problems with their parents and developing and completing daily lesson plans.

The overall Pearson correlation between the S.R.R.S. and the T.E.S.I. was very positive, 0.64, significant at p=0.001. Intercorrelations across items of both tests were also positive for most pairs with a Pearson R between 0.30-0.50 significant at p 0.05. Correlations of events in both tests related highly to their respective rank order but was not limited to them. It might have been due to the influence of highly stressful events on the general stress level of the body. This study concluded therefore, that life stressors are highly correlated to teaching stressors. The magnitude of the stressors in one group could affect the magnitude of stress in the other, therefore spreading a higher level of stress to many events, including low level stresses.

Discriminant analysis revealed significant differences between sub-groups in the sample studied, for age, sex, type of school and level of experience. These results contradict the findings by Cichon and Koff (1978), but might be due to the comparatively small size of sample used in this study.

Research Issues

While the results of the project were comparable to the results obtained by Holmes and Rahe (1967), some fundamental questions remain concerning the teaching events that were rated in this study. The stress induced by specific events varied widely across individuals in such groups as sex, age, type of school and level of experience. Further investigations, using a larger sample, may be conducted to examine the differences between these variables.

A second area of research may study the administrators' perception of teacher stress. That is, in light of the fact that "management tension" was a significant source of stress, how would principals complete the Teaching Events Stress Inventory? How would their perceptions differ from those of teachers?

A third area of research could involve studies that seek to determine how stress affects teachers in the performance of their professional duties. Maslach (1976) has identified at least six mechanisms employed by professionals under

stress which impaired their performance. Teachers were not included in her study. Would they react in similar ways and with what effect on students?

The life and teaching events rated in this study were all "external factors" which mediate an individual's perceptions of stress. A fourth area of research could investigate the relationship between perceived stress to "internal factors" such a biological and physical threshold sensitivities, intelligence, verbal skills, morale, personality type, psychological defenses, past experience and a sense of mastery over one's fate (Rabkin and Struening, 1976).

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MEASURING SHADOWS: PLANNED PERFORMANCE AS A CONTINGENCY APPROACH TO EVALUATION OF DIRECTORS OF EDUCATION IN ONTARIO SCHOOL SYSTEMS

Susan Sydor

The organization is the lengthened shadow of the individual.

-Emerson

An educational leader has been defined as the driving force behind initiatives to move education ahead to the achievement of its highest goals. Conflict arises from emphasis being placed on the director of education acting either as a quasi-bureaucrat or as an educational leader. The importance of the chief executive officer as the figurehead of the local educational system cannot be understated. A flexibility must be developed allowing the director to respond as the situation demands: either as functionary or as statesman. Each role provides an opportunity for the exercise of influence. In any case, the director of education, as an individual, holds a most significant place in the educational system.

Some of the principles of organizational behaviour, organizational development, and management theory and techniques are applied to educational governance in terms of organizational effectiveness. The focus is on one activity, evaluation of personnel as a major responsibility of school boards.

Evaluation has been applied to program and student achievement for some time. The cost of education, the challenges of managing shrinking school systems, and increasing public demands are some of the reasons for and intensification of the emphasis for supervisory practices to be applied to teaching personnel. Performance reviews of supervisory officers and directors of education are seen as logical extensions of programs of staff supervision. If supervision is to be effective, it must be seen as a worthwhile experience. Administrators need to create an atmosphere of collaboration among the staff. Evaluation of supervisory officers and directors provides an opportunity for modelling professional behaviour and a commitment towards growth in professional competency.

A generalized framework for performance review of supervisory officers that is applicable to both the specialized role of the chief executive officer as well as to the role of superintendent or any other managerial position is proposed as part of the management of the board.

The study was developed through the following strategies: Field Study (Interviews with directors of education, supervisory officers) concurrently with Research into the literature dealing with evaluation, management theory and leadership, and a Questionnaire Survey of trustees.

Evaluation is presented in the context of staff development and accountability. The accountability factor rests with the board of trustees, both as supervisors and managers of the educational system.

Effectiveness on the job is measured by results of decisions or actions taken. This approach is objective in that the criteria is easily understood and communicated while being verifiable through observation and discussion. Inclinations to judge the person rather than the role performance are lessened and attention is placed on achievement. It is planned performance because annual targets integral to the job definition are emphasized and evaluations are made according to the achievement of stated and agreed upon long and short term goals.

The process is never ending if the purpose is improvement of performance. How well an organization is doing is dependent on how well it is achieving its goals and how well it is managed.

Evaluative procedures designed to improve performance appear to be avoiding the issue of incompetence. Proof of professional competence is elusive at best. Perhaps this is so because reference to competence in reality exceeds its operational meaning. To be competent is defined as being qualified for a task. Executive competence in terms of performance review has its foundations somewhere outside this definition. Performance of the duties as required by law and job descriptions may be considered as really only conditions of employment. In performance reviews trustees should anticipate at least such minimal compliance with their responsibilities. It is probably more true to say that trustees want fo find excellence in the role performance of their administrators. Ability should appropriately complement effort so that behaviour will be suitable. Seven factors have been presented for consideration as bases for perceived incompetence at the executive level.

The most obvious indicator of performance inadequacy is the consistent failure of the board to endorse the recommendations of administration. Performance review

based on management by objectives has the potential to reveal the above described foundations of performance inadequacy. When evaluation is designed to be primarily judgemental, it will then be appropriate.

When growth dimensions are the basis of performance review it is more than specious. The accountability factor will be satisfied, but what the board seeks, excellence, will be the result of constant attention to the individual and environmental determinants of performance. In this way, the evaluative process has the capacity to encourage behaviour that will actually exceed expected standards.

The board and the administrative team should determine together, the goals and objectives of the system and the time frame for the process. This means that trustees will not only have a direct influence on what will be accomplished, but will also bear responsibility for helping to assure that allocation of resources in direct support of the objectives. The administrative task is to implement procedures that will result in the achievement of these goals. This is the most obvious and meaningful of the procedures that cause the board and administrative team to function as a unit. The cooperative effort increases commitment, the degree of commitment having a direct bearing on the eventual achievements, because of the indication of support. Public education requires the technological skills of administration and the breadth of viewpoint of trustees. How these are molded into the moral exercise of their individual and joint powers under changing conditions will determine the true value of education as an institution of public service.

A CONTINGENCY APPROACH TO BOARD-ADMINISTRATIVE DECISION MAKING

Margaret Sullivan

In the introduction to this study, the writer indicated that she would examine the functional relationships in the decision-making process of boards and administrators as these relationships have evolved in recent decades. Several conclusions have been reached in the development of the project.

First, school systems today operate within a dynamic environment in which a variety of interest groups exercise influence over educational decisions. If school systems are to be capable of meeting the challenge of remaining viable and relevant to the society of which they are a part, they must redefine the roles and role-relationships of system members. Two critical groups, boards and administrators, must lead the way to meeting the challenge.

The roles and role-relationships of boards and administrators have changed, and must continue to change in the coming years. Legislative and executive distinctions between the roles of boards and administrators are no longer strictly defined. Thus, greater flexibility must be exercised in the determination of who should make a decision on various issues.

An intimate interdependence of these two groups is necessary if they are to be capable of meeting mutual school system goals. The decision-making process is fundamental to the attainment of these goals.

The level of interaction required for decision making within the jurisdiction of these two critical groups is a function of the issue upon which the decision must be made, and the intensity of the forces which impact upon board-administrative decision making. In order to reach optimal decisions for the school system, the values of the community, administration, interest groups, and board must be integrated into a decision which will be acceptable to all.

If the process for decision making is contingent upon the various factors which create a change in the issue

condition, the probability is increased that the decision will be optimal, its implementation facilitated, and its legitimization effected. In addition, the minimization of conflict which such a proactive approach implies will lead to more positive board-administrative relationships. The Contingency Model outlined in this paper could facilitate the choice of which process to use for board-administrative decision making on specific issues.

The focus on patterns of influence in board-administrative decision making provided valuable insights into the impact of this variable upon the decision-making process. It is hoped that the dysfunctional effects of struggles for power by boards, administrators and interest groups can be minimized or eliminated through the use of a contingency approach to decision making. It is the writer's opinion that if boards and administrators spent more of their energies determining how they will decide, that is, what process they will use for decision making, and enter into decision making as status equals, they will have a more effective and efficient decision-making process which will lead to optimal decisions. Then, the energies wasted in conflict and conflict resolution can be diverted into constructive activities.

The research study conducted by the writer served to validate the assumptions made by the writer that varying levels of influence will be exercised by boards and administrators depending upon the decision area. As well, the assumption made that trustees desire to increase their current level of influence over decisions was overwhelmingly substantiated by the survey results.

The two most important categories of decision making from a trustee perspective were personnel management and school finance and business management. These results become more important when the accompanying results for desired levels of importance, and t-tests which are significant at the .001 level are studied. It seems reasonable to conclude that the increasing demands for accountability for the use of public funds, and the demands for better educational services emanating from the community are related to these scores, which are somewhat higher than other category scores.

An important finding of the survey results was that trustees do not desire to increase their influence over decisions to such an extent that they wish to exercise the major or sole influence over the decision, other than in a few decision areas.

Instead, the writer concludes, that trustees wish to engage in a co-operative decision-making process with administrators, and through meaningful interaction and the sharing of relevant information achieve effective decisions. Trustees, then, do not wish to be

administrators, nor do they wish to expend their energies obtaining information which the administrators have easy access to. Trustees wish simply to ensure that the values, ideas, and concerns of the various publics of a school system are considered during the decision-making process.

If the decision-making process is effective, trustees may exercise their accountability to the public for the governance of the school system. Then, boards and administrators can mutually exert their energies towards making their school system viable and relevant to the society of which it is a part for the benefit of students and all other system members. Nothing could be more important.

RESOURCE GUIDE FOR GIFTED CHILDREN

Brenda R.M. MacDougall Lamothe

Society at different periods of time has taken various attitudes in its treatment of the individual with superior potential. Depending on the held values of a given time, society either ignored such individuals or focused a significant amount of attention on them. Interest in the children with superior ability has risen and fallen like the mercury in a thermometer.

Three broad approaches to the concept of giftedness have been identified. The first approach is the psychopathological concept which confined intellectual superiority to a form of mental disorder. The second approach is the social historical view in which the gifted are defined in terms of their social impact on society as seen in an historical frame of reference. The third approach is the statistical concept. This approach measures mental ability by psychometric tests.

In the early 1900's the term gifted child referred to the child with outstanding intellectual ability only. Terman in his pioneering longitudinal study of gifted children took his main cut-off point from the top one per cent of the population using an I.Q. of 140 or above on the Stanford Binet Intelligence Scale as the criterion score for inclusion in his research group.

In the early 1960's there was a shift away from using only I.Q. scores. Other forms of identification came from J.S. Gilford's analysis of the human intellect. E. Paul Torrance's research work on creativity furthered a broader concept of giftedness. Character, personality, independence, leadership and creativity were now being considered as part of the definition for giftedness.

Despite the attempts to develop a widely acceptable description of giftedness there are several sources that complicate this issue. One is the wide choice of testing instruments with various I.Q. cut-off points which may differ from study to study.

Ambiguous terminology causes great concern and frustration. Some descriptions have been extremely broad to encompass almost all individuals. Other descriptions may have rigid

demarcation lines that become the "rule of thumb". Whether one considers intellectual ability, capacity, creativity, specific talents, environment and heredity, they all affect the meaning attached to giftedness.

Some of the concerns associated with giftedness stem from the views held by society. The general public is unprepared and perhaps unwilling to make special provisions for the gifted. This attitude stems from a socio-cultural ethos which is reluctant to single out one element of the population for special services, particularly when this element is above average. Choosing this section of society for special support is seen by the public as favouritism for an endowed elite. Another cause for concern is the popular and professional interest that has recently been invested in this group of children. Suddenly these children are the focus of the government and media attention. Their lives may be carefully examined; they may be the objects of study and recipients of hot new educational materials. This may be beneficial if the funds and manpower actually develop effective programs.

Moving from an oversimplified view of giftedness to a more complex conception is a new, exciting and challenging educational avenue.

Identification

A major concern of our educational system is the identification of the gifted child. The identification procedures are both expensive and time consuming. Therefore, it is necessary to develop effective and efficient screening methods that will make possible the identification of all gifted in a school.

The identificaion process is usually introduced by a screening device using standarized group I.Q. tests and/or achievement tests. The advantage of group testing is time and money saving and gives us a quick survey of those having high potential. The disadvantages of these tests tend to penalize those who have reading problems and/or those who come from a different cultural background. These group tests may cause the child to become tense and so unmotivated and disinterested that he/she does not work to the best of his/her ability.

Parallel with group testing are tests of creativity and interest checklists as well as observational devices which may be made by parents, teachers, peers and/or the child.

The second step of the identification process is usually based upon the results of the preliminary screening and involves a variety of individual tests. This assessment provides additional knowledge of the level and quality of the child's ability and style to learn.

Early identification is necessary in order for the student to receive adequate stimulation and educational support. Identification must be an ongoing process, not just one assessment. Some of the characteristics of the gifted child are readily observed in their everyday behaviour. Curiosity, imagination, a keen sense of humour, a broad attention span, retentive memory and well developed reading habits are some of the qualities that may appear early in the gifted child.

Two other subgroups that must be considered are the underachievers, who have distinctly different characteristics from the high achievers and the culturally different gifted children.

Thus educators must not only be made aware of the characteristics of all the different types of gifted children, but must give careful thought to the planning and implementation of the identification program before they begin the process. Identification should be based upon thorough knowledge of the instruments used, the students, their abilities, characteristics, achievement levels, their interests and personal attributes.

Program

The primary step in program development is planning. Every community has a unique constellation of factors that must be examined. All aspects of the community and the educational system must be determined in order to have a realistic base for the size and scope of the program. Grouping procedures that are deemed best for gifted children may be inadequate for a different type of gifted child. Such things as goals of the program, type of group, number of pupils identified, teacher competencies, resources and funding must be acknowledged for each school system.

Organizational Planning

For many school localities it may be necessary to examine other organizational designs that program planners have found useful for their particular locality. With this additional information, administrators become better informed to determine what organizational design will best suit their community, budgets and student needs.

Organizational procedures may consist of the following types:

1. A centralized design may serve the needs of the gifted student from a number of different school districts. A resource centre may be one means to fulfill the school system's needs.

2. Another design may include a cluster grouping of schools from one district or one system.

3. An itinerant teacher may be required for a family of schools or districts.

Several program approaches which may be undertaken by school systems are:

i Acceleration - These programs allow children to move through the educational system at a faster pace.

ii Individualized Educational Program (I.E.P.) - An I.E.P. is a written document developed and revised annually in conference involving parents and educators involved in this process.

iii Ability or Cluster Grouping - These groupings are usually decided at every grade level. The teacher must organize the potentials and modify his/her approach to the situation. This approach allows for many learning and teaching experiences which could not be easily accomplished in a regular lesson by the classroom teacher.

Curriculum

In order for a program to be used effectively, a priority for all school systems is the development and implementation of a curriculum. Several of the popular curriculum designs that may be used are as follows:

1. Bloom's Taxonomy - a classification system for isolating cognitive and affective processes.

2. Renzulli's Enrichment Triad - three types of enrichment:

Type I -general exploration
Type II -group training
Type III -formulate and produce.

3. Guilford's Structure of the Intellect (S.O.I.) - This model gives organization to the various factors of intellect and arranges them into three dimensions: content, operations and products.

Meeting the challenge of the gifted child is no easy proposition. Making contributions and providing opportunities for them to develop their capabilities will help to strengthen our society.

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INTERVENTION STRATEGIES FOR THE BEHAVIORAL RESOURCE TEACHER

Elizabeth Purser

When looking specifically at children with behavioral/emotional disorders, several considerations are necessary. Presently a teacher's awareness and observation of maladaptive behaviors is the reason for initially classifying a child behaviorally/emotionally disordered. When problem behaviors arise, teachers may or may not, depending on their expertise, implement a variety of corrective methods. Individual differences will result in various levels of acceptance. What is regarded as a problem behavior to one teacher may not be of concern to another, depending on one's experience and one's personal perspective. When a problem is recognized the principal and teacher may intervene in such a way that the problem is alleviated and no further intervention is necessary. However there may be children displaying either a wider range of disorders or more severe maladaptive behaviors which might result in the intervention of a resource teacher for behavioral/emotional problems. To provide assistance, a number of approaches or intervention strategies are available to be used either by the resource teacher or to be recommended for use by the classroom teacher. Therefore it was the author's intent to identify and analyze those educational interventions which have proven effective in order to make such strategies accessible in planning for children with behavioral difficulties. What follows is a summary of approaches across a broad spectrum of educational perspectives and philosophies.

Positive Reinforcement Approach

How well-prepared are we as educators to cope with children's behavioral problems? Is the teacher's ability "to cope" with these problems limited to resigning himself/herself to a disruptive student or class? If a child's behavior is preventing him from progressing as he should, something other than just coping is needed. A conscientious effort on the part of the teacher to eliminate unacceptable behavior from a child's repertoire is needed. At the same time, the child's present behavior usually serves some purpose so the teacher cannot focus only on eliminating undesirable behavior. A complementary

strategy must also include teaching the child to substitute an acceptable behavior for the unacceptable one. This overall approach generally describes the classroom management model based on positive reinforcement. Positive reinforcement is the provision of a desirable consequence for a deliberate behavior. Based on operant conditioning, the consequences of an act will increase or decrease probability of its re-occurrence (Mahoney, 1974).

B.F. Skinner posits, "If the consequences of an operant performance are rewarding or reinforcing then the behavior will be more likely to be repeated in future, similar occasions" (Gelfand, Jenson and Dew, 1982, p. 68). It has also been found that praising and rewarding a child for paying attention will reduce nonattentive behavior (Hewett,1980).

According to Ed Pino (1982) positive reinforcement is a tool, not a cure-all, that can turn a classroom around if a teacher consistently tries to "catch a kid being good." The secret of the successful use of positive reinforcement is in determining consequences or reinforcers to motivate the child to behave in an acceptable way. Once positive reinforcement has been adopted by the teacher as a meaningful classroom approach it can be used as a preventive strategy.

When Positive Reinforcement is Not Enough

In a corrective situation positive reinforcement may not be structured enough to extinguish inappropriate behaviors. Consideration then, might be given to time-out. Time-out procedures require the physical removal of the child from usual opportunities to gain reinforcement (Mansdorf, 1977). It usually requires exclusion from the classroom. "Very often this technique involves briefly isolating the child in an unoccupied...uninteresting location" (Gelfand et al., 1982, p. 424).

If the child's behavior is such that he/she needs to be isolated the teacher must specify certain conditions at the initiation of time-out. The child should know: (a) why he/she is being isolated, (b) where he/she is to go, and (c) how long time-out will last. When the time-out is over, the child should return to regular class activities. Hewett and Taylor (1980) suggest that teachers strive towards the ideal situation where class presentations are so exciting that no child will want to be given time-out.

Assertive Discipline Approach

Lee Canter with Marlene Canter (1980) has developed a straight-forward technique which leaves no question regarding who is the leader in the classroom. To become an assertive teacher one must provide firm, consistent

discipline. The students and teachers alike know what is expected and also what the consequences will be, for either acceptable or unacceptable behavior. An assertive teacher believes when pupils know what is expected of them, and are given positive reinforcement for meeting those expectations, desirable classroom behaviors will usually be seen.

Social Learning Approaches

The positive reinforcement model is an intervention strategy which stresses what major influence the environment has on behavior. For the many children who come to school with less than adequate social skills another environmental approach is available. This intervention includes strategies which have been developed from social learning theory.

Social learning theorists do not look for traits or constructures of processes; instead they assume the social behavior is under the control of the environmental factors both present and past (Rubinstein, 1975). Social learning theory suggests social behavior will improve if the teacher places his/her emphasis on appropriate social skills through modelling. Modelling has been used as an effective method of teaching desirable social responses. "Modelling is the acquisition of new behavior through observation and imitation of other people's behavior" (Gelfand, 1982, p.244). If a pupil is encouraged to imitate socially acceptable behavior and is then rewarded for the imitations, assimilation of these responses may occur. The child can then begin to develop a personal repertoire of acceptable social skills. Stephens (1977) contends that instruction in social skills is most successfully accomplished by direct and systematic teaching of appropriate social behaviors to children involving the use of a social skills curriculum. Frank M. Greshman (1982) suggests social skills be taught to handicapped children before mainstreaming takes place since it is unrealistic to assume that socialization will occur automatically between handicapped and non-handicapped children.

Intervention Strategies-Humanistic Approaches

Individual Psychology

Individual or Adlerian psychology is an intervention which places emphasis on insight to correct misbehavior rather than on structuring the environment to facilitate change. This insight enables involved personnel to teach new behaviors more effectively and enhance school discipline. "Presently our school system is in a dilemma regarding discipline. The controversy over punishment cannot be resolved unless we give teachers alternative effective

techniques for dealing with children who misbehave and refuse to learn" (Dreikurs and Cassel, 1972, p. 11). The application of Adlerian psychology can be an effective alternative approach for some teachers. It suggests the basis for a good teacher is a democratic leader who looks on her class with optimism. This optimism paves the way for each child to find his/her place within the class. This is essential because, "all misbehavior is the result of a child's mistaken assumption about the way to find a place and gain status" (Dreikurs and Grey, 1970, p.16). If a child does not recognize his/her importance within a group, logic can be distorted. This faulty logic can result in unacceptable behavior which in fact, may isolate the child from the group, if the child does not determine the purpose or goal of the misbehavior. When the faulty goal has been identified and then changed, the behavior can also be altered. The four mistaken goals of misbehavior are: (1) attention getting, (2) the struggle for power, (3) revenge, and (4) using disability as an excuse (Driekurs and Grey, 1970).

Dreikurs and Cassel (1972) present a precise way of identifying the goal or goals which motivate the child's behavior.

Logical and natural consequences are important aspects of the corrective procedures advocated. Adlerian or Individual Psychology is an approach that can be used in an encouraging, supportive atmosphere by a teacher who believes in the worth of each child, in his/her ability to change and to contribute positively to the group. A teacher realizes, "no child would switch to the socially unacceptable way of life if he were not discouraged" (Dreikurs and Cassel, 1972, p.50).

Invitational Education

Another regular classroom approach which emphasizes the need for an accepting, supportive environment is Invitational Education. Purkey (1970) stresses the need for the humanistic qualities of warmth, freedom and respect to be sincerely displayed by the teacher. The inviting teacher will concern himself/herself with what is going on inside the student rather than looking at the overt behaviors of the child. This acceptance and respect displayed by their teacher will encourage the children to be accepting and respectful towards each other. We have to help children free themselves of any negative aspects they have been taught about themselves, which may be affecting their behavior. The teacher as a facilitator in the achievement of goals should have an understanding of the basic elements of humanism and the personal-humanistic approach.

Self-concept, how a child perceives himself, is often the primary concern of special education teachers. "Academic success or failure appears to be as deeply rooted in concepts of the self as it is in measured mental ability, if not deeper" (Purkey, 1970, p. 14). It is important that special education teachers who are trying to raise the level of intellectual functioning of each child incorporate into their curriculum, certain methods of enhancing the growth of self-concept, and thus potentially increase the academic performance. Purkey reinforces the need for educators to work towards this development.

Donald W. Felkner (1974) gives the teacher a positive attitude toward his/her ability to work with children with a low self-concept. Felkner's procedure is appealing to many educators because he looks at the child as he is now, rather than looking at what has caused his problems. His is a method that can be used to take the child forward from today. The five keys to self-concept are:

1. Adults, praise yourselves.
2. Help children to evaluate realistically.
3. Teach children to set reasonable goals.
4. Teach children to praise themselves.
5. Teach children to praise others.

(Felkner, 1974, p. 123)

Like all intervention strategies, building self-concept takes time and effort. If self-concept is to be an on-going component of curriculum, children should be assessed periodically. Initial testing could take place at the Junior-Kindergarten level to determine the amount and type of intervention necessary. Subsequent self-concept ratings would then be more meaningful because there would be a base line with which to compare results. Only in this way can we honestly evaluate growth in self-concept.

Conclusions

Until behavioral curricula are developed and implemented to facilitate a preventive approach to behavioral instruction, the resource teacher can be of valuable assistance to the classroom teacher by implementing various intervention strategies to accommodate those children with behavioral/emotional disorders.

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RESEARCH AND DATA ANALYSIS ON A MICRO-COMPUTER FOR M.ED. CANDIDATES

J. Kerr

Preface

Computers, especially micro-computers, are being used increasingly in many different fields. Indeed, many of the ideas regarding the utilization of computers have been radically changed in the last five years. Micro-processor chips are being used in such diverse entities as 'Bagpipes', 'Coke Machines', and Electronic Speed Controls' for your vehicle. Your students in all probability are using them in their schooling, and at home. However, one use of computers upon which you can depend, and of which you will confront in the near future, is data analysis.

It is my intention to assist M.Ed. researchers in becoming familiar with the process of using a computer to analyse their data for projects and/or research endeavours. Obviously, these notations are not the whole answer; but, they should set you in the correct direction and ultimately save you time and vexations in the process.

These notations are divided into three sections: Part one deals with using MINITAB, a fine set of programmes available to the researcher at many locations. MINITAB is available to candidates at the Brock University Computing Centre, O.I.S.E., McMaster University Computing Centre and at many other installations. Part two makes note of the WANG 2200s system, an other micro-computer system, available to M.Ed. researchers within the College of Education, and the Physics Department of the same institution. Part three deals with the Commodore PET/CBM systems again accessible through the College of Education, and probably closer to home, from your own school or local school board.

Perhaps the most important aspect of analysing your data is to ferret out assistance. Often people are embarrassed or too arrogant to query others. That is a mistake. Ask your graduate instructor, your course advisor, and even your companions in class. Everyone is generally willing to assist if they can.

Part One - MINITAB

MINITAB is a collection of statistical programmes. To most researchers they are labelled with the rubric of CANNED statistical programmes. This collection is either purchased or rented from a vendor by large institutions. By punching or keying in the appropriate codes a variety of statistical analyses can be executed by the researcher. The ensuing is a list of the more general analyses that can be conducted:

```
HIST  - histogram
PLOT  - plot your data
TPLOT - 3D plot of your data
MPLOT - multiple plot on the same axis
NRAN  - random data generate
ORD   - ordering or sorting of data
SORT  - sorting of data
RANK  - ranking of data
JOIN  - makes new columns
RECO  - recording your data
CONV  - converting or transforming your data
ADD   - adding columns of numbers
SUB   - subtracting columns
COUN  - finds the number of values
SUM   - finds the sum
AVER  - finds the average
STAN  - finds the standard deviation
MED   - finds median value
MAX   - finds maximum values
MIN   - finds minimum values
BIN   - finds binomial probabilities
POIS  - finds poison probabilities
ZINI  - finds 'Z' score
ZIES  - does a 'Z' test
TINT  - finds 'T' score interval
TTES  - conducts a 'T' test on your data
WILC  - conducts a Wilcoxon test
(etc)
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There is an additional 10 statistical test and/or functions that are contained within the package. And it's well worth your while looking at MINITAB as a vehicle for statistical analysis. The programmes may be executed via a computer card deck - which is rather old fashioned now - or on a PET made to operate as a terminal or a dumb terminal itself affixed to a large mainframe computer.

Part Two - WANG 2200s System

The WANG 2200s micro-computer system is also available to the researcher. This system comes complete with a series of CANNED programmes under the general rubrics of (1) Statistical/Engineering, (2) Mathematics, and (3) Finance/Utility - Games. As a researcher, you may run your data through a programme or just initiate a run or

programme similar to playing 'Space Invader' or other cartridge video games. First, you 'MASTER INITIALIZE' the system. That's a fancy label for just plain turn on the micro-computer. You do this by (1) turning on the power to all of the peripherals, that is the typewriter, and console, etc. You turn on the typewriter by flipping the switch ON (see the side of the typewriter); turn on the console by reaching around to the back and flipping on the toggle switch. Next, turn on the main power. That is,turn ON the main power switch to the Central Processor Unit - it's in a big black box! A 'READY' will appear on the television or CRT (Cathode Ray Tube) and the system is ready to utilize.

If a system failure should occur, try to restore operation by touching the silver reset button on the console. If resetting this button does not work, you either get random numbers or nothing at all, then master initialize the system again, that is, turn the power switch on the CPU (the black box) off, and then on again. If the system is still non-functional report the perturbation.

Crunching Your Data on the WANG

So you wish to run a t-test, correlation or perhaps a t-plot of your data! Take the WANG manuals off the shelf and scan the Table of Contents for the canned programmes available on tapes I,II, and III. You will notice on inspection that there are a number of programmes you can execute. Assuming you are interested in conducting a Pearson Moment Correlation, a linear correlation on some achievement scores and a Piagetian coefficient, you would note that the linear correlation in the master manual is in block# 6 of tape II. You can load this programme into the memory of the 4k WANG system by typing the ensuing:

SKIP 5f ..then press the RETURN key
LOAD.....then press the RETURN key

You are now ready to execute your linear correlation by simply running the programme. This is done by typing RUN on the keyboard, and following it with a press of the RETURN key. Notations as to the prompts given on the screen for the WANG system are provided in a three ring binder labelled statistical programming manual.

In most cases this process will provide an answer to your needs on the screen. Many times you wish to walk away with a hard-copy or printed page of the results. If you wish to do this then you must tell the computer to do just that. To change the output device from CRT or cathode ray tube to the typewriter you must deal with the special names or numbers of these devices as assigned at the factory. This has the aura of the James Bond movies in the 1970's. Remember 007!

The assignment task is not much different. At the factory the screen was assigned a special number 005. Now you see why we mentioned James Bond. The typewriter was assigned a special number of 211. To change the type of output device, execute the ensuing:

(1) Choose what output is to be displayed or typed.
(2) Insert a statement with the following instructions to the computer.

(2.1)typewriter output.....
(BASIC line #)SELECT PRINT 211
(2.2)Screen or CRT output....
(BASIC line #)SELECT PRINT 005

If you insert 15 SELECT PRINT 211 in a programme, it may be advisable to insert as well 999 SELECT PRINT 005 near the end of the programme to return COMMAND to the CRT or screen of the computer. Otherwise, many of the prompts will be shunted out to the typewriter rather than the screen.

Rolling your own!

You may use the programmes provided in the WANG programme tapes (I,II,III) or you may write your own programme using the myriad of books on the market as a guide. The WANG 2200s is a hard wired machine. Chips have been preprogrammed for BASIC, and this language is available as soon as you turn the micro-computer on. As well, like the programmes in the mainframe computer, BASIC programmes on the WANG are not compiled but run in the interpreted form. Another alternative is to adapt an already existing programme, customizing it for your own needs. You may do this with the WANG 2200s system utilizing the SPECIAL EDIT keys at the top of the keyboard.

Many books containing programmes written in BASIC are available on the bookshelves today. To enter and run such programmes, you must simply type the programmes from the text into the system, letter for letter, word for word. If an error occurs on execution of the programme, you must refer to the system manual for the WANG system to decipher the error or coding vexation. To the neophyte, this might sound complex, indeed, it does to many researchers without attempting such suggestions on an actual machine. But, in practicing some of these points, one begins to appreciate the simplicity of conducting research on a micro-computer such as the WANG system.

Using the Commodore CBM/PET

Each of the aforementioned means requires, or a least did require, that you trek to Brock University or an institution with similar equipment. But times have changed! Within your own school, church, home or shopping mall you'll probably find a micro-computer capable of doing very

sophisticated data analysis. Indeed, the current Commodore CBM/PETs have a plethora of software available to execute such analysis.

Much of this software is more sophisticated than the canned or commercial programmes available on the large mainframe computers. For example, your students can run a 3-way ANOVA repeated measures analysis on your classroom CBM/PET that turns out to be a nightmare on a large mainframe computer. Indeed the frequently mentioned SPSS or Statistical Package for the Social Sciences analysis pak available on most institutional installations does not afford the researcher the luxury of doing this analysis without taking out a pencil and writing down some intermediate results. On a classroom PET you simply enter your data, and type RUN.

If you can't find a PET in your school, check the local neighbourhood; there are probably five or ten at the neighbourhood secondary school or even in one of your student's homes. The College of Education has a number for your use; McMaster University is another source, as is Sheridan College and Niagara Community College. The University of Waterloo is another.

Two years ago, I watched students in Toronto doing their homework in the EATON'S CENTRE, and at various vendors' stalls below the TORONTO DOMINION CENTRE. I doubt, therefore, that any vendor or sales person today would ask you to leave the premises if you asked permission to use the store's micro-computer to conduct your data analysis. In fact, I'd rather suspect they would encourage you. Try it, if you can't locate any convenient hardware or micro-computers.

Once you have lined up a machine, turn on the computer. The ON/OFF switch for the PET is on the back of the computer. Use your left hand as you are facing the screen. When the PET says READY on the screen, it is your turn to do something. Insert the programme tape into the cassette recorder, then press REWIND on the recorder. After rewinding the cassette, press the STOP key on the cassette recorder. Now type LOAD and press the RETURN key. The PET will respond with PRESS PLAY ON TAPE #1. Once you have followed through with those instructions, the PET will respond with SEARCHING...then LOADING (you must be patient) and ultimately READY. When you see the ready, you type RUN and press the RETURN key.

But what about programmes, you say? Right! I'm coming to that issue. One source of such statistical programmes is the College of Education, at Brock University. The Instructional Resource Centre within the College has an assemblage of all types that work on your school's PET. You may come to the College of Education and sign out the particular programme in which you are interested. Or, better still, you may forward a cassette tape and a request for a specific programme or programmes to the Resource Centre. Give the request to your thesis/project advisor or

faculty member. The cassette and instructions on its use will be returned to you so you can initiate your analysis at your convenience at your home or school. Indeed, this is the trend for the immediate future. Candidates such as yourself will be initiating research endeavours within your own local environs. More and more, the technology - both hard and soft, is being made user friendly.

The ensuing list represents a short sample of the statistical programmes available to educational researchers from the College of Education. If you have a specific request that is not on the list, check with your advisor regarding possible additions.

Scott's Congruence
Mann-Whitney Test
Mean Variance and Standard Deviations
Geometric descriptive statistics
Normal, Binomial Distributions
Poisson Distributions
Chi-Square Distributions
Chi-Square Test
Median Scores
Student's T Test and Distributions
F Distributions
Linear Correlation Coefficient
Linear Regression
Multiple Linear Regression
Nth Order Regression
Geometric and Exponential Regressions
Curvilinear Regressions
Plots of functions, or variables
Matrix routines: inversions, additions, multiplications
Multiple Regression Analysis
- up to 45 predictor variables with residuals

ANOVA's - 4 way
- 3 way (2 between and 1 within)
- 3 way
- 1 way
- 3 way (all repeated)
- 2 way (independent groups)
- 2 way (1 between and 1 within)
- 3 way (all independent groups)
- 4 way (all independent groups)
- 2 way (all repeated measures)
- 1 way (independent groups)

Analysis of Covariance
Cochran's Test
McNemar Test for Significance of Change

Many more are available from the Instructional Resource Centre at the College of Education.

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MAN'S DEVELOPMENT IN RELATIONSHIP TO HIS ENVIRONMENT

W.S. McNeil
A.M. Wissler

Environment has been a major factor in determining man's development and success. Topographical and climactic conditions exert great influence on our philosophy, attitude, fears, and doubts, resulting in social, religious, economic and political advancement. Clearly man's surroundings shape his culture and civilization.

We are presently experiencing an awakening to this environmental importance and to the realization that, while we may alter our surroundings to suit our needs, we are still constantly influenced by the environment.

The project was designed to provide a starting point for teachers and students of local urban and environmental studies. It serves both as a resource kit and as basic integrated material for unit and course development.

The information is designed to offer the users complete flexibility in application. The complete project could form the basis on which a full course of study could be developed, with individual sections forming units or lessons within the course. It also supplies the opportunity for building one's own lesson or unit design from selected project materials. It enables students on independent study to pursue individual research interests.

Following initial pilot testing of the project, the material continues to undergo continual modification and review. Future plans will allow students to devise a development plan for inhabitants of a hypothetical area, using the topographical and climatic components of the project.

A unique feature of the project, apart from the format, was that it was the combined effort of two individuals from different backgrounds and schools. The fact that the complete project has proven both valuable and practical in its approach under two differing philosophies adds credence to its application.

APPLYING INVITATIONAL EDUCATION TO INTERMEDIATE LANGUAGE ARTS

Cathy Hillgren

The Intermediate Language Arts teacher deals with adolescents who arrive with varying language backgrounds. When they leave the intermediate level, they will either feel good about the language experiences they have encountered, or be discouraged and hesitant about language studies in the future. My Master's project was the preparation and presentation of a workshop designed to suggest ways that the Intermediate Language Arts teacher can make her classroom an inviting place which fosters student growth and optimism. It was not designed to deal extensively with the theory of Invitational Education, but rather to give a variety of inviting strategies for the classroom teacher.

The workshop dealt with the four components of Language Arts - reading, writing, listening and speaking. Each area was examined separately, but with the realization that all are interrelated. The workshop handout consisted of pages designed to be cut and mounted on 5x8 cards. Each card dealt with one specific strategy. There were 10 cards for reading, 10 for writing and 10 for listening and speaking combined.

I tried to select strategies which were "inviting" to most people. Invitational Education, first detailed by William Purkey, is not a formalized technique or a gimmick for helping teachers do a better job. It is a perspective. It is a positive approach founded on the idea that people - teachers and students alike - are valuable, capable and responsible.

The idea behind my workshop was the premise that students need to be taught to improve and extend their language, but it is important that the teaching is done in such a way that the students' self-concepts are enhanced, not diminished. It was my hope that the teachers who attended my workshop would learn some new strategies to use in their classrooms and also re-examine some familiar strategies to determine the effect they have on their students.

The whole project was a learning experience for me, but it was especially beneficial to my students. The research I

did made me more aware of their needs during the Intermediate years and caused me to formulate new ways of meeting these needs more successfully.

The following are samples of reading, speaking and listening and writing cards:

READING CARD BEING A MODEL

The teacher must be a model. Wendell Johnson wrote in 1956: "Reading is something we do, not so much with our eyes, as with our knowledge and interest and enthusiasm, our hatred and fondness and fears, our evaluations in all their forms and aspects. Because of this, a fondness for reading is something that a child acquires in much the same way as he catches a cold - by being effectively exposed to someone who already has it."

The teacher should read aloud each day. She should share books or chapters from the books which are "too good to miss". She should read her favourite poems, stories and passages so that students know she values reading. Reading aloud to students shows that the teacher is willing to give of herself to the children in an activity just for the child's pleasure. The students experience a closeness with the teacher as they "live" the character's lives.

An inviting teacher invites herself to read <u>first</u> and the students follow.

SPEAKING AND LISTENING CARD TEACHER RESPONSES

When a student says something, the teacher should refrain from always saying, "Great!", Be specific. What was good about it?

If teachers increase wait time to five seconds or more before commenting, the length of student responses will increase. As the wait time is increased, the number of student questions increases and there is more student-student interaction. Teachers should encourage this by using inviting statements like, "That is interesting; how does that fit with what Susan said?"

Teacher sent invitations lead to student invitations to discuss.

WRITING CARD: AUDIENCE

It can be disinviting to just be told to sit down and write. It might be easier if the students are taught to write for an audience. Have them write stories for primary children and sew them into a book. Have them write a class newspaper for their peers and parents. Have them write letters to friends. Have them write notes to classmates and to you. (Set up a classroom mailbox).

In general, let them know they have something valuable to say and that someone will enjoy it. It is encouraging for any author to know there is an audience for his work.

POSTER SESSION CONCERNING
"AN INVITING CLASSROOM CLIMATE"

Hal Hillgren

The workshop reported in this project was given May 8, 1981 at Brock University. It was designed to illustrate to classroom teachers methods of creating and maintaining an inviting classroom climate. It was to be used as a follow-up to a general discussion of Invitational Education. The emphasis, therefore, was on practical use not on educational theory. Participants were exposed to several techniques and strategies that would help them to establish an inviting environment in their own situation. It also supplied methods to invite yourself as well as others.

The handout consisted of several inviting strategies designed to enhance personal awareness of inviting and disinviting environments, behaviours and personalities, an annotated bibliography and a chart outlining implementation of strategies, etc.

The project was the culmination of one year's directed work including research, written work and the presentation of the workshop itself. It was very interesting, educational and enjoyable to do.

What follows is an example of a calendar I used in my class to systematically invite every student in my class. You might want to try it too.

EVERY DAY IS A SPECIAL DAY

WEEK ONE

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AWARD DAY Prepare a blue ribbon award for those who would be proud to show others their achievement. Awards could be made for being polite, prompt, happy, etc. 1. _____ 2. _____ 3. _____ 4. _____	**TOUCH DAY** Probably for every kid turned off by being touched there are just as many who are turned on. Which of your pupils could really use a "laying on of hands"? 1. _____ 2. _____ 3. _____ 4. _____	**NOTE DAY** There is something definitive about committing anything to writing. Who are some kids who would relish a personal note? 1. _____ 2. _____ 3. _____ 4. _____	**SURPRISE DAY** Everyone loves a surprise. A coded message, a mystery box, a present that can't be opened until 3 p.m. 1. _____ 2. _____ 3. _____ 4. _____	**FEELINGS DAY** Everyone has feelings, but sometimes we're too busy to deal with those feelings. Today pick three people and ask about their feelings, acknowledge their feelings. 1. _____ 2. _____ 3. _____

NOTE: By using this week's calendar and the next three, you will involve most of your class twice.

You do these things all the time; the advantage of this is that it encourages you to focus your attention on certain pupils each day.

EVERY DAY IS A SPECIAL DAY

WEEK TWO

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
THANK YOU DAY Saying, "I want you to know how much I personally appreciate the way you've.... can be a highlight of some kids year. 1. _____ 2. _____ 3. _____ 4. _____	SECRET DAY Being trusted with a secret or being enough of an insider to gain exclusive knowledge is something really special for some. Name 3 insiders for today. 1. _____ 2. _____ 3. _____	FAMILY DAY For those who are proud of their families or of a particular member there is no nicer expression of concern than to share with you some thoughts about that person. 1. _____ 2. _____ 3. _____ 4. _____	PEER DAY Those who struggle to please their peers would all the more welcome a chance to have special recognition in FRONT OF THEIR PEERS. 1. _____ 2. _____ 3. _____ 4. _____	QUESTION DAY A question reflects a concern and makes some assumptions. Ask 4 kids some questions about their feelings, ambitions, fears and desires. 1. _____ 2. _____ 3. _____ 4. _____

EVERY DAY IS A SPECIAL DAY

WEEK THREE

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
FORGIVE DAY	TEASE DAY	PRAISE DAY	CONFESS DAY	FAVOUR DAY
Kids who always get themselves into difficulty sometimes get a feeling of futility about ever starting with a clean slate. Name 3 kids who need to be convinced that you are not holding a grudge.	Some kids enjoy being "picked on" playfully. Choose 5 who like to be teased today-- and do it.	Some pupils are embarrassed by praise; others thrive on it. Decide who could really use some honest, genuine praise.	To tell a kid you were wrong can change the whole attitude. e.g., "My first impression of you was that you were trying to take advantage of me- I know now that I was wrong."	In HOW TO WIN FRIENDS AND INFLUENCE PEOPLE, Dale Carnegie says that the best way to make a friend is to let him do a favour for you. Aren't there some personal favours 4 kids could do for you?
1. _____	1. _____			1. _____
2. _____	2. _____			2. _____
3. _____	3. _____			3. _____
	4. _____			4. _____
	5. _____			

EVERY DAY IS A SPECIAL DAY

WEEK FOUR

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
COMMENT DAY Choose an outstanding quality (especially for those who have few outstanding qualities) and comment on the quality.	GOODY DAY Symbolically, giving someone candy is a high priority strategy for showing affection. List 6 kids who would really respond to a "gift". 1. _____ 2. _____ 3. _____ 4 _____ 5. _____ 6. _____	SMILE DAY Make this list extra-long because smiles are so quick and fleeting and effortless and can be done without interfering with other activities. Don't forget though this is a warm personal, "I like you for being you" smile. In fact, don't make a list. Give it to everybody.	PRESTIGE DAY Many kids never get a chance to be "important". Prestige is too often reserved for those who already have it. Think of 2 kids who might like a few minutes at the office. 1. _____ 2. _____	LAUGH DAY Whatever it takes to get 'em to laugh--do it! A joke, a riddle, a tickle, a contagious laugh. Name three shy ones who could use a good laugh. 1. _____ 2. _____ 3. _____

ACTIVITY PACKAGES FOR THE IMPLEMENTATION OF THE BASIC THINKING SKILLS

Lynne M.K. Blake

An analysis of student workbooks commonly used in the Primary Division reveals that they offer very limited opportunities for skill development, and frequently identify incorrectly the skills included in the activities. Activity Packages were designed as an alternative to student workbooks.

The Basic Thinking Skills Chart offered the basis from which Activity Packages could be developed that would meet the needs of a child from Kindergarten to Grade Two, and across the barriers between objects and the abstract.

The Activity Packages include first, Activity Cards for the development of the skills of Classification, Correspondence, Seriation and Probability. Second, objects, picture cards, symbol cards and print cards to provide for the four task levels in the development of a skill. And finally, a book that follows the growth strand of a particular skill, for example, seriation.

The Activity Packages were tested by children and were adaptable to a wide variety of topics or themes. Teachers using the Activity Packages were able to observe, evaluate and record the skill development of children in small groups or individually on a continuous basis.

The Activity Packages, consisting of both instructions and materials, are available from the Instructional Resource Centre, College of Education, Brock University, in a kit accompanying the master's project "Activity Packages for the Implementation of Basic Thinking Skills".

BASIC THINKING SKILLS

PROBLEM SOLVING IN MATHEMATICS

Glenn E. Wright

In looking at the general nature of problem solving in mathematics the literature reveals two distinct conclusions. The first is that students who have a problem solving method do better in problem solving than students who do not have a problem solving method. The second is that mathematics problem solving and mathematical development should be interwoven.

As a problem solving method I chose the Mathematics Problem-Solving Strategy (Popp and Seim, 1978, p. 8). To illustrate the problem solving strategy I selected the proportional thinking strand of the Basic Thinking Skills (Popp, Robinson, Robinson, 1974, p. 15).

The proportional strand dealing with rate ratio, per cent, property tax and inflation has created difficulties for students and adults alike. The examples of problems solved in Chapter 5 of this project show some of the thinking processes from Grade 5 to Grade 8 through the developmental process.

There are four basic ratio questions, three basic per cent questions and the special topics like sales tax, commission and discount are treated as per cent questions. The Grade 5 ratio questions are done by equivalent fractions and trial and error. The Grade 7 ratio questions are done by the cross multiplication rule. This change in method from Grade 5 to Grade 7 is possible because of the new skills learned and the new concepts grasped. This shift demonstrates how the student's thinking develops from level to level along the proportional thinking strand.

In Grade 8 I have shown per cent, greater than one hundred, and handled it like a ratio question. The hundred stays constant in the ratio box but the unknown can vary in the other three positions.

The use of the Mathematics Problem-Solving Strategy to solve problems in the proportional thinking area was very effective. Students who used this organizer did 8% better in answering questions than students who used any other method.

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nx:Bennett

NEEDS ASSESSMENT:

AN INTEGRATED APPROACH TO CURRICULUM DEVELOPMENT

IN INTERMEDIATE SCIENCE

Ian S. Carter

An overview of the Project

The purpose of this project was to collect benchmark data on the teaching of intermediate science in order to implement strategies to improve program quality. The investigation applied a flexible curriculum development model in order to achieve these goals.

An assessment procedure was used in order to identify specific program needs. A series of post needs assessment steps were then applied in order to integrate the recommendations of each of the individuals and groups involved in program development. This process of planning, field testing, continuous feedback, evaluation and revision ensures the effective implementation of program strategies. A major advantage of this model is that it contains a built-in process for continuous self-renewal of the curriculum planning process itself.

This pragmatic model of curriculum development closely approximates what happens in daily practice. It recognizes that the development process is a dynamic, complex interaction of people wherein many of the political dimensions are resolved at the informal level of operation. The process confirms the argument of Kirst and Walker (1971) that curriculum decision-making often proceeds in rather small, incremental moves through the vertical administrative power structure in local school systems.

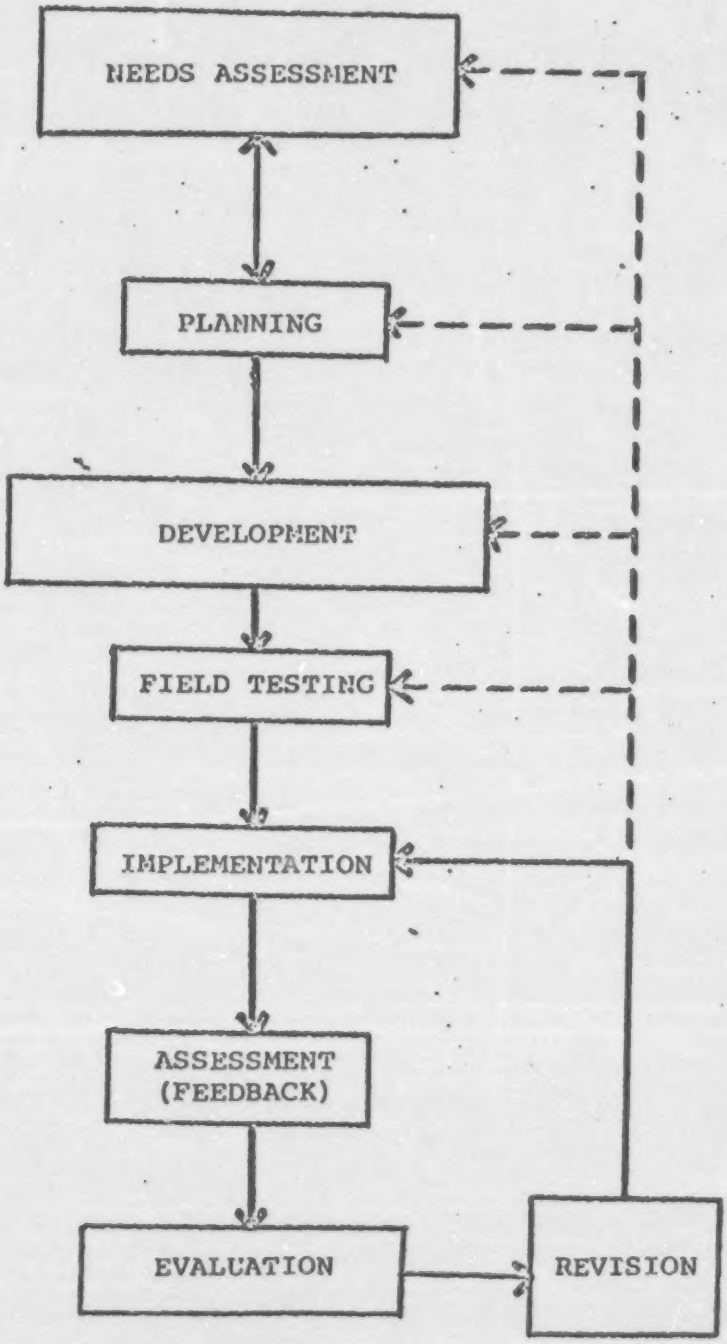
METHODOLOGY

1. The Curriculum Development Process

Figure I illustrates the curriculum model developed and applied during this project. Distinct stages of development are apparent from the initiation of a curriculum idea until its implementation in a program. A

FIGURE 1

The Curriculum Development Process



Extent of Revision is dependent upon assessment results

brief description of each stage as it relates to the current project is provided:

1. a) Needs Assessment:

A committee of 5 science chairpersons/reps made use of informal discussion, a questionnaire feedback mechanism,and several workshops in order to assess the current state of affairs with respect to intermediate science in 28 junior high schools. This stage of the process culminated in the distribution of a Data Summary.

b) Planning:

A great deal of planning accompanied each stage of the process. Since the curriculum development cycle is dependent upon people for effective implementatation, it waas essential to identify and involve as many individuals and groups as possible. Questions relating to involvement, areas of program concern, use of data, approval of recommendations, and responsibility for implementation were anticipaaated and discussed throughout the entire process.

c) Development:

The committee also recognized that it has a responsibility to "act upon" the data produced from the needs assessment process. The Data Summary was presented at a regular meeting of Science Chairpersons/Reps and reaction was invited. This group was asked to make use of the data to encourage dialogue with members of their department and principals. A feedback sheet was also distributed and specifiec recommendations were requested.

d) Field Testing:

Tentative recommendaions were prepared by the committee and subsequently workshopped with chairpersons/reps. Suggesions for revision were invited and strategies for program development were discussed.

e) Implementation:

English and Kaufman (1975) remind us that the most

severe test of the needs assessment procedure comes in acting upon the needs identified in the process. The committee encouraged the continuous involvement of all constituencies in the formulation of solutions to close the gaps identified. A plan of action was created which included both target dates and a monitoring process.

f) Assessment:

Continuous feedback was solicited from all constituencies which served to provide information about any or all of the previous steps as required.

g) Evaluation and Revision:

Informal discussion and several workshops have provided sufficient information to revise and administer the needs assessment over three consecutive years.

2. Needs Assessment

A needs assessment procedure was tied to the curriculum development cycle in order to achieve project goals. Figure 2 illustrates the flow of curriculum development when prefaced by the needs assessment described in the current project.

A questionnaire was distributed to 28 junior high schools in order to develop baseline data for use by science staff and administration. Specific need areas were identified using an adaptation of the 14 steps of the assessment procedure described by English and Kaufman.

FINDINGS AND DISCUSSION

1. Need Statements

The following need statements were identified and published after discussion and analysis of the Data Summary distributed to all interest groups. It will be recalled that this completed each of the generic steps of needs assessment described by English and Kaufman.

NEED STATEMENTS

1. Leadership:

   (a) 17 chairpersons have umbrella responsibilities

   (b) subject responsibilities cover a wide and complex range

2. Timetable:

   (a) average class size is 32 but some individual classes as high as 39 students

   (b) hours of instruction per year range from 60 - 130h

   (c) some schools are receiving less than the ministry requirements for grade 9 science

3. Science Staff:

   (a) Qualifications:

      (i) 26% of science staff have a degree in science

      (ii) 4 schools have no science teacher with a degree in science

   (b) Experience:

   Data Summary reveals that relatively inexperienced staff are in charge of laboratory assignments. This may be due to loss of staff by seniority and new teaching assignments.

(i) 16% of total staff are teaching science for the first time this year

(ii) 40% of total staff have 5 or less years' experience in science

(iii) 49% of total staff teach only 1 or 2 science classes

4. Ministry Guidelines:

(a) actual time required to teach core units in each grade is greater than the Ministry requirement

(b) 86% of respondents feel that there is not sufficient time to meet the content requirements of the guidelines

2. Implementation of Recommendations

Doerrer and Pulley (1977) remind us of the need to identify power figures and develop strategies to work with and through established groups in order to influence curriculum issues. The committee formulated a plan of action after consultation with colleagues, the Science Co-ordinator, and several influential principals. It was agreed that heartland issues such as improvements in timetabling and staffing should be negotiated on an inschool basis. Individual science chairpersons could make use of the Data Summary during consultation with their principal.

It was also recognized that both the Science Co-ordinator and the Assistant Superintendent (Curriculum Branch) represented important pockets of potential persuasion. Implementation strategies were shared with both, and the Co-ordinator volunteered to invite the appropriate Ministry official to a future meeting in order to share suggestions related to content/time requirements within the guidelines.

Committee members agreed that both the timeline and sequence of response were extremely significant. Careful planning resulted in the distribution of a plan of action which included specific need statements, recommendations and target dates.

SUMMARY

1. Main Conclusions

The needs assessment procedure described in this study has proven to be a useful strategy for the identification of specific program needs. The findings suggest that junior high school science teachers perceive a need for improvements in the need areas which follow:

1. Increasing in-school science leadership
2. Establishing class sizes which maintain both a safe laboratory environment for all students and a high quality program
3. Offering at least the minimum number of hours of science instruction recommended/required by the Ministry
4. Attracting and keeping staff members with a strong academic background and special interest in science
5. Encouraging the continued contribution of experienced science teachers to intermediate programs
6. Meeting the inservice needs of a large number of inexperienced science teachers
7. Increasing the amount of time which the Ministry allots to science in Grades 7 and 8

The data base created by this study provided a useful basis for replication studies and a subsequent trend analysis.

Finally, this study provides a model for curriculum development which recognizes and responds to the needs of all constituents in the decision-making process. Specific strategies to improve program quality can be identified and implemented. A small number of schools have, indeed, used the model for that purpose.

2. Implications for Programs for the Improvement of Junior High School Science Education

In an era of budget cuts, declining enrolments, and middle school developments, it is imperative that science educators design and implement specific strategies to improve the quality of science instruction in schools. It is pleasing to note that the Science Co-ordinator used the results of this assessment as part of a rationale for a proposal to assess the entire science program from grades 7-9 in all North York schools.

The Co-ordinator has also responded to the inservice needs of the large number of inexperienced science teachers identified in this study by organizing a series of supper seminars to deal with Laboratory Safety. Should junior high school teachers continue to receive the assistance they need, it is likely that the quality of science teaching will improve. The resultant upgrading could also lead to improved student performance in science and perhaps even stimulate student interest and increased enrolments in science courses in the senior high schools. These latter implications need to be investigated further.

The curriculum development model developed in this study can continue to make an important contribution to the work of various committees responsible for designing and implementing appropriate programs for use in the evolving middle school. This process has already been applied by an Intermediate Division Curriculum Committee for the development of several interdisciplinary units.

It should also be noted that this curriculum development strategy is an effective method of soliciting feedback from a large number of individuals and groups. Their continued commitment to program quality is certain to make a positive contribution to intermediate education.

Research Issues

Further investigation of the causes of and the strategies to remedy the weaknesses in intermediate science programs cannot be delayed. For example, it would be helpful to make use of an instrument such as the Moore Assessment Profile to determine the major inservice needs of the large number of relatively inexperienced science teachers identified during this study.

A specific concern deserves immediate study; it is important to determine why large numbers of experienced science staff seem to be leaving the junior high school system. An informal instrument could be designed to determine why they are leaving, where they are going.

Finally, it is interesting to observe that it is extremely difficult to access provincial data related to the program areas assessed in this study. It would be helpful to create provincial baseline data so that individual school boards have an opportunity to compare their information against a provincial sample.

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AN EVALUATION METHODOLOGY FOR ONTARIO ELEMENTARY SCHOOL LIBRARIES

James B. Crux

At the time the initial study was proposed, there were no comprehensive models for evaluation of elementary school libraries and elementary school teacher/librarians. Having discovered this lack through relevant committee work, I decided to study the topic and develop an appropriate, provincially applicable evaluative model.

Review of The Formative Years, HS 1 1979-81, and the Ministry's as then unpublished document, Partners: Action Through Interaction, followed. In addition, a request for information and applicable evaluation documents was made to a stratified sample of Ontario Boards of Education. Simultaneously, a review of the relevant literature was undertaken.

The literature search, done through the ERIC facility at Brock University in St. Catharines, revealed seventy-four papers pertaining to elementary library evaluation of which seven proved to be applicable to the development of evaluative criteria for elementary school level libraries and teacher/librarians. The seven papers divide up into three categories: (1) generalized criteria, (2) philosophical rationales for evaluation and (3) evaluative methods. In the first category are works (Ladley, 1969; Case, 1969) which proposed an evaluation checklist and a three position horizontal scale. Both lacked sufficient detail to be useful in remediating areas of low assessed performance.

The second category, of philosophical rationales, was either highly detailed (Jones, 1973) or conceptually significant (Mahor, 1973) in that exterior norms or interior norms were suggested as the basis for any type of evaluation.

The final and third category was methodological in nature and expanded upon Mahor's paper (Stroud, 1978) by developing a detailed model of needs determination, performance areas, evaluator selection and evaluation instrument determination. A second article (Loertscher, 1979) describes a detailed model using a five point rating scale. The final work (Illinois Library Association, 1979)

proposes an internal school evaluation dialogue with subsequent formal evaluation taking place on a dual five point scale which rates degree of acceptance or applicability of criteria along with the assessed performance of those criteria.

A major contribution to the study and the development of an evaluative model was the work of George B. Redfern in his book, Evaluating Teachers and Administrators: A Performance Objectives Approach (1980). Adopted from Redfern, with modifications, is the concept of summative and formative evaluation as well as some of the criteria used in evaluation.

The survey of Ontario Boards of Education previously mentioned was completed as the literature search progressed. The sample was stratified according to size (large urban centres), location (widespread geographical dispersion), grade level (elementary students), and type (publically supported systems). Survey response was one hundred percent. Of the twelve representative boards samples, three boards had an evaluative program in place, three had a fragmentary program and six boards had no specific teacher/librarian evaluative model or process. Translated, it appears that only approximately twenty-five percent of the boards in Ontario at the time of survey (1981/82) had a formal evaluation program in effect with the remaining seventy-five percent either partially or entirely unserviced in terms of evaluation of facilities, program or teacher/librarian performance.

In terms of the norms used to judge and/or rate a library and teacher/librarian's performance, eighty percent of the boards doing rating, do so with standardized norms. One board uses negotiated norms for evaluation. Other boards make use of a chicklist or a summative style hierarchical rating format.

Areas of evaluation fell into the following categories: guideline conformity, organization and administration, planning, human relations and instructional procedures. Only sixty percent of boards surveyed do library and teacher/librarian evaluation, implying that forty percent of Ontario's boards either do not evaluate or they have no evaluation system. However, in those boards with evaluation documents, all, or one hundred percent, use administration as a criteria, planning and human relations are found in eighty percent, and instructional procedures are evaluated in three of the sampled documents, representing fifty percent of samples doing evaluation. This is a most disturbing statistic as it implies that, in most cases, teacher/librarians are never evaluated on their teaching skills.

In brief, evidence suggests that evaluation is not nearly as widely practised as it should be and that where it is

practised, evaluation is uneven, fragmented and disjointed. In addition, it often focuses on factors such as administration rather than more difficult to assess areas such as teaching behaviours. Based on this review, a model was then developed which has applicability for boards wishing to up-grade their evaluation methodologies. In terms of the model, summative evaluation was defined as a final, conclusive process involving hierarchical ratings and with employment status effects. On the other hand, formative evaluation was remedial - a series of tentative, open-ended, feedback and skills oriented practices. The processes are seen as ends on a continuum, not as antithetical processes.

The model itself represents a performance objective approach. It is constructed of six categories (Crux, 1982):

1. Responsibility Criteria -- These are the responsibilities of the teacher librarian as defined by the Ministry of Education, the local board and the school.

2. Needs Identification -- This stage involves evaluator and evaluatee examining job performance areas for strengths and weaknesses as the basis for objective setting.

3. Objective Setting -- In a second pre-conference, the evaluator and evaluatee discuss specific objectives and word them in performance terms as well as setting the evaluation methodologies to be used.

4. Objectives Performance -- Actual monitoring and observation for objectives attainment takes place at this time according to the criteria and schedule mutually agreed upon in (3).

5. Results Assessment -- The evaluator or evaluators collate the data they have compiled to date and evaluate it for the attainment of the previously stated and agreed upon objectives. Specific comments and guidance should be prepared at this time to encourage development of strong areas and remediation in weak ones. A time line for the recommendations should be provided.

6. Results Conference -- This stage incorporates the final discussion between evaluator and evaluatee. It should be balanced in its focus on objectives achieved and not achieved and give reasons and methods for improvement. Reformulation of unachieved objectives should take place thus enabling criteria to be established for any subsequent round in the formative evaluation process.

The final results conference should cover a minimum of the following six items:

a) discussion of long and short range goals and objectives

b) recognition of good work;

c) mutual exchange of suggestions for improvement

d selection of top priority job tasks or targets

e) clarification of responsibilities for evaluator and evaluatee

f) correction of misinformation and misunderstanding

When these procedures have been followed, a formative evaluation will have been completed. The library and teacher/librarian will have selectively and effectively been observed, and, where necessary, mutually guided toward a more effective provision of service for the library's users, both teachers and students.

Finally, it should be stressed that this work is by no means exhaustive or definitive; however, it is my belief that the method outlined here is better than what we had provincially, and that it is a movement in the direction of more constructive, co-operative, and progressive evaluation for elementary teacher/librarians and libraries.

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PROJECT BUSINESS: A QUASI-EXPERIMENTAL STUDY

Alice O. Schutz

By co-operative arrangement between the Lincoln County Board of Education in St. Catharines and a local business committee under the auspices of Junior Achievement, Canada, an innovative program called Project Business was introduced. The Project Business program provided twelve weeks with one-hour per week classroom instruction, discussion and on-site visitations (field trips to businesses) by a qualified business consultant. He discussed with the students such topics as economics, Canadian economy, banking, the stock market, consumerism and career education. The consultant was teamed with a classroom teacher who used Project Business as an extension of his guidance or social studies curriculum. Each used the other's area of expertise for the greater benefit of the students. This study deals with a group of four Grade 8 classes in two St. Catharines elementary schools. Four classes were given a project Business treatment and pre- and post-tested to measure academic achievement. A similar group of four classes acted as a control group and were pre- and post-tested without any intervening treatment. This study evaluated the growth in knowledge about business which was associated with the Project Business treatment.

Curriculum research in Canada on the subject of this type of co-operative venture is limited. While co-operative ventures, such as work study programs, have been a part of the Canadian scene for some time, they have not been evaluated for curriculum consideration. Co-operative ventures similar to Project Business appear to be more frequent and more established in the United States. Even there the emphasis is mainly in implementation, rationale and how to make contacts and less frequently on the actual effect a program of this kind has on the learning accumulation of students.

The Project Business Program Evaluation was undertaken by a joint committee consisting of members of the Project Business committee, the Lincoln County Board of Education, O.I.S.E. Niagara and this researcher. Five instruments were devised to test such aspects as content acquisition, career attitudes, career choice and reactions to the pedagogic program methods by students, principals, teachers and consultants. This broad report was published in July

1981. It dealt with six classes and a similiar six classes as control. This study was restricted to two schools with four control and four treatment groups and dealt only with the content acquisition portion of the testing. Control and treatment groups were pre- and post-tested to make a case for statistical differences of mean scores. The major finding of this study was that Project Business does make a difference to the knowledge acquisition of business concepts.

It may be helpful to explain the relevance and the necessity of such a link between business and education. Ideally a teacher should connect the real world with that of the classroom. Inherent in this idea is an awareness of technological advances, of information explosion, of fluctuating job requirements as well as societal trends. Few teachers, however, have either the time or the opportunity to become experts in the economic or technological intricacies of the real world. Business too needs to respond to the complexities of a rapidly changing and demanding environment. Business cannot afford to lose touch with education or the students who will become their future workers. They need the brightest minds to solve the problems which confront them as businessmen. In the words of Anthony Jay, "Economy does not need an actuary, it needs a visionary". For this reason an interaction between business and the schools should be beneficial and enriching to both groups.

Curriculum research in school-business interaction deals traditionally with programs relating either to vocational or career education. Only recently have authors advocated the need for developmental co-operative programs which address economic education and children in the K -12 age group. These authors suggest that the programs be project based, continuous and relevant. The results of this study indicate that Project Business is a worthwhile educational interaction which addresses an appropriate grade level in the curriculum.

Some recommendations which could be integrated into subsequent treatments would be the following:

1) short objective unit tests to supplement the Project Business materials

2) female consultants to encourage role models for the girls

3) greater discussion and preparation for field trips with students and teacher on the part of consultants

4) involvement of students as doers rather than as listeners or observers

5) greater involvement of teachers and parents;

6) an expansion of the program.

Co-operative programs like Project Business, though effective, are not without problems. One of the most obvious is that of control. In this study control was carefully addressed and shared. Dialogue between the partners becomes essential. Teacher expertise is another serious problem. Only well-informed, secure teachers can exert the mandatory curriculum control. Pre-training or experience in the area of business or economic education would ensure more quality teacher involvement. A very great problem is cost. For this program the cost was borne almost entirely by business. This may not be possible as the program obtained sponsors, consultants, field trip sites and materials. Teachers may lack either the time, knowledge or connections to do this well. Another problem involves time scheduling. It was easy to make room for one program such as Project Business. Making room for others would require a drastic change in the curriculum structure. Above all, every attempt should be made with this and other co-operative ventures to ensure that pupils are truly learning and benefitting in the three curriculum areas - cognitive, affective and behavioural.

Project Business as a model of future curriculum direction bridges many gaps and provides new, yet workable ways in which education can be made more responsive to the demands of a technological environment. This kind of program could serve as a model for the sharing of ideas, expertise and costs and, if properly evaluated,provide the relevance, flexibility and capability which our future demands.

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DEVELOPMENT OF A CHECHLIST TO EVALUATE SEXISM IN THE HIDDEN CURRICULUM

S. Cesar

Sex role stereotyping has been a concern to the Ministry of Education, to its members, and to its existing school systems. For educators, it is a part of a movement which asks both men and women to question their roles in society and to examine the ways in which these roles are transmitted. The intent of this project was to examine the relationship between the sexes; to look at messages and images people receive from language and media; and specifically, to look for these messages within the context of the school system.

Sex role stereotyping in this project was viewed as a behaviour taught to children by adults in typical daily interactions. Through these interactions a definite lesson emerged, being a boy was one thing, being a girl was another. The developed notion of a "woman's role" or a "man's role" emerged as rigid and restricted and ignored the abilities and capacities of the individual person.

This project made the basic assumption that stereotyping exists to some degree in all schools. It is a myth that continues because it is nurtured from various points inside the educaional system. It is not limited to a specific group of people, such as teachers, but encompasses the totality of the system.

A second assumption was established, that educators realized an ingredient to happiness is self-knowledge, an appraisal of personality and skills. It was assumed that no educator would erect a roadblock to that happiness in anyone's life. If educators are informed and made aware of items that continue stereotyping, they will want to eliminate them and produce a healthier environment in which children can grow and develop.

The literature review dealt with different facets of sexism to better acquaint the reader with this topic. The definition of sexism, its birth and perpetuation and its consequences were discussed within the realm of society and its members.

The development of a checklist was intended to procure

knowledge and awareness on sexism, its development, and its continuation. It was hoped that this would assist educators in the task of developing an environment free from stereotyping of males and females. it was intended to help teachers become more conscious of the lack of information concerning girls and women in textbooks and other materials; it was intended to help them become aware of their own attitudes and perhaps unconscious actions towards girls and boys.

The checklist hopefully provided a variety of objective and projective measures by which teachers could gather a knowledge of attitudes and actions of themselves and children toward sex-role concepts. It provided for both verbal and non-verbal behaviours. The design of the checklist made it pertinent to the areas of Primary and Junior divisions and sex role stereotyping was explored in relation to classroom climate, school climate, materials, behaviour and curriculum. The knowledge gained from the checklist facilitated the development of some suggestions for reducing and eliminating stereotyping in these areas.

It was the intention of this project to learn more about the sources of stereotyping that would likely influence children and to heighten the educator's awareness of these sources.

AN EVALUATION COEFFICIENT ANALYSIS OF INDIANS IN TWELVE RECOMMENDED INTERMEDIATE LEVEL HISTORY TEXTBOOKS IN BRANT COUNTY SCHOOLS

Catharine Papp

Purpose of the Study

Most Canadian children learn at an early age that native Indians are inferior. They develop this attitude through a variety of experiences and realities. Indians have been, and still are, to some extent, depicted in books, on television, and in films as warring, torturing, scalping, and stealing. Responsibility for promoting racist attitudes can be placed with adults. Government policies, society's attitude, and textbook content all contribute to racism.

The area of textbook content is of specific concern to educators. If racism against Indians is to be halted, then textbooks must not be discriminatory. The question to be answered by this research was: to what extent is racial bias and discrimination against Indians reflected in the textbooks in use in Ontario in 1982? In addition, the purpose of the study was to acquaint teachers with the methods used to ascertain whether textbooks are biased. It was hoped teachers would apply this knowledge to textbooks in use in their classroom. By eliminating from use those that are biased, one of the avenues of racism could be removed from Canadian society.

Methodology of the Study

ECO Analysis was the type of content analysis employed in the study. It was designed by David Pratt to provide a valid and reliable quantitative measurement of value judgments about minority groups in textbooks. The instrument is constructed on the assumption that attitudes are communicated in textbooks through the value judgments expressed. The evaluative essence of an expressed value judgment is located in the evaluative term which it contains; thus in the statement, "Indians are skillful", the author expresses a value judgment by linking the evaluative term "skillful" to the subject "Indians".

In order to find out what attitude a writer was expressing towards Indians in the sample, the first step was to list all the evaluative terms used throughout the book to describe Indians. This procedure gave a picture of the nature of the expressed attitude. Then, by calculating the percentage of those terms that were favourable, as against those that were unfavourable, a score was reached. The score always falls between 0.0 (totally unfavourable) and 100.0 (totally favourable). This enabled the researcher to locate the author's attitudinal position on a favourable-unfavourable continuum. Further to the study, a count was made of the five terms that were used with greatest frequency to evaluate the target group.

Sample

The sample for this study is twelve Intermediate Level history textbooks, approved by the Ontario Ministry of Education in Circular 14. All are presently in use in Brant County Schools. All were published between 1970 and 1982. The textbooks are:

1. Kirbyson, Ronald C., McCreath, Peter L., and Skeoch, Alan. Discovering Canada Settling A Land. Scarborough: Prentice-Hall, 1982.

2. Deir, Elspeth, Deir, Paul, and Hubbard, Kenneth. Canada Years of Challenge to 1814. Toronto: Holt, Rinehart and Winston, 1981.

3. Marsh, James H. and Francis, Daniel. New Beginnings A Social History of Canada Volume 1. Toronto: McClelland and Stewart, 1981.

4. Bercuson, David. Opening the Canadian West. Toronto: Grolier, 1980.

5. Garrod, Stan, McFadden, Fred, and Neering, Rosemary. Canada Growth of a Nation. Toronto: Fitzhenry and Whiteside, 1980.

6. Wood, Dea[illegible] and Remnant, Robert. The People We Are. Toronto: Gage Publishing, 1980.

7. Collins, Paul and Sheffe, Norman. Exploration Canada. Toronto: Oxford University Press, 1979.

8. Hundey, Ian. Canada: Immigrants and Settlers. Toronto: Macmillan of Canada, 1979.

9. Saint, Julia and Reid, Joan. Origins Canada's Multicultural Heritage. Don Mills: Academic Press, 1979.

10. Smith, David, ed. Discovering Our Heritage.

Toronto: Ginn and Company, 1977.

11. Marinello, I.L. and Evans, Allan S. Call Us Canadians. Toronto: McGraw-Hill Ryerson, 1976.

12. Willows, Gerald C. and Richmond, Stewart. Canada Colony to Centennial. Toronto: McGraw-Hill, 1979.

Results

All textbooks in the sample were favourable in their attitude towards the target group. But, there was a difference in the degree of favourableness of the message. The evaluative assertions in four textbooks had a coefficient of 100.0. Five had a coefficient of 90.0. One had a coefficient of 73.7 and one of 63.6. Only in one textbook did the message rate barely favourable with a coefficient of 56.0. It was not possible to categorize the degree of favourableness of the message according to the original date of publication, the publisher, or the sex and number of authors.

The five evaluative terms most frequently applied to Indians were all positive. None perpetrated ethnic stereotypes. Rather they evaluated Indians as a skilled, hard-working, and religious group of individuals who were respectful and generous in their interaction with others. The evaluation presents a positive role model for Indian students.

Conclusions

ECO Analysis is a useful instrument for analyzing value judgments about Indians in textbooks. Canada professes commitment to the concept of cultural pluralism and this is reflected in the twelve textbooks in the sample. The writers of these textbooks appear aware of the dangers inherent in perpetuating stereotypes and myths concerning Indians. They have presented an evaluation of the target group that is positive and non-discriminatory. This should assist in eliminating biased racist attitudes in Canadian children.

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AN ANALYSIS OF THE EFFECTS OF SELECTED VARIABLES ON THE ATTITUDES OF EDUCATORS TOWARD THE USE OF CORPORAL PUNISHMENT IN THE SCHOOLS

(A Summary of the Study)

Wayne A. Chamberlain

Introduction

The use of corporal punishment in our schools has long been a concern of educators everywhere. Some educators have criticized such a method of behaviour control. They claim that it is a cruel discipline method and that there are many more constructive ways of dealing with children. The Minister of Education for Ontario, Dr. Bette Stephenson, has introduced legislation which will ban the use of corporal punishment in Ontario schools. This legislation will affect a lot of people. It is important to find out how these people feel about corporal punishment.

The Problems and Subproblems

The purpose of this investigation was to survey educators in a school board in Ontario to determine their attitudes toward the role of corporal punishment in our schools today and to study the relationship between these attitudes and selected independent variables. The variables were sex, age, experience, job description and level of education of an educator, and the size of the school in which an educator works. The variables became the subproblems in the study and these six subproblems generated six hypotheses which were stated in the null form. The study proposed to test the six hypotheses.

The Procedures

A random sample of 200 educators was drawn from a population of 870 educators. The sample included classroom teachers, remedial teachers, librarians, vice-principals, principals, and counsellors.

Each of the members of the sample received a copy of the questionnaire used in the study. A cover letter accompanied each copy of the questionnaire and this letter gave instructions for completing the survey instrument. The completed questionnaires were returned in pre-addressed envelopes.

The instrument used in the study was divided into three parts. Part I sought information about the respondent. This information included sex, age, teaching experience, job description, school size and level of education. Part II of the questionnaire was an opinionnaire on behaviour control. The respondents would choose one of six responses to eighteen statements on behaviour control. Part III contained twenty-four blocks or cells, each of which permitted the correlation of a school offense with some procedure or tactic related to school discipline.

The questionnaire had been adapted from instruments used in other studies and therefore validation had already been done.

The raw data from the completed questionnaires was transferred to computer cards and several types of analysis were performed. They included frequencies for the six variables, crosstabulations for the variables, chi square calculations and Pearson product-moment correlation coefficients.

The Results

Chi square calculations revealed several significant relationships between the six independent variables and several statements from Part II of the questionnaire. The sex of a respondent was related to his/her response to the statement "It is less desirable to strap girls than boys". The age of the respondent was related to his/her response to the statements "Corporal punishment is a necessary means of maintaining control in the schools", "Corporal punishment tends to make students feel more hostile towards the school" and "Physical punishment by parents tends to produce aggressive children". The experience of a respondent was related to his/her response to the statements "If a student hits a teacher, the teacher should hit back," "Corporal punishment tends to make students feel more hostile towards the school", and "Strapping is a good way of improving pupil behaviour". The job of a respondent was related to his/her response to the statements "Praise for students will more than likely make a difference in their level of achievement" and "It is less desirable to strap girls than boys". The size of the school in which a respondent works was not related to his/her response to any of the statements. The level of education of a respondent

was related to his/her response to the statement "Students should obey teachers without question".

The Pearson correlation coefficient calculations resulted in the rejection of two null hypotheses and the acceptance of four of them. The two hypotheses rejected were:

1. There is no significant correlation between the age of an educator and his/her attitude towards the use of corporal punishment.

2. There is no significant correlation between the experience of an educator and his/her attitude towards the use of corporal punishment.

The four hypotheses accepted were:

1. There is no significant correlation between the sex of an educator and his/her attitude towards the use of corporal punishment.

2. There is no significant correlation between the job description of an educator and his/her attitude towards the use of corporal punishment.

3. There is no significant correlation between school size and an educator's attitude towards the use of corporal punishment.

4. There is no significant correlation between the level of education of an educator and his/her attitude towards the use of corporal punishment.

The results from Part III of the questionnaire showed that educators would most often use corporal punishment and suspension for the offense of rowdiness: out of seat, sneering and swearing, and vandalism. Conference with the pupil was the tactic chosen more often in all of the other five offenses. A larger percentage of males than females would use corporal punishment for the behaviour control tactics listed in Part III of the questionnaire. Educators in the 26 to 30 years old age group would use the strap in more cases. Teachers over 50 would use corporal punishment the least. Educators in the 16 to 20 years of experience group seemed to indicate a greater use of the strap. Counsellors would use corporal punishment the least and intermediate teachers the most often. Educators in schools with 150-250 students would use the strap more frequently than the educators in smaller or larger schools. No definite statements could be made about the level of education of the respondents and the use of corporal punishment in Part III of the questionnaire.

Conclusions and Implications

Certain conclusions can be drawn from the results of this study pertaining to the use of corporal punishment in the schools which were surveyed:

1. The younger educators (20-40 years old) tend to agree with the use of corporal punishment in the schools, while the older educators would rather not use punishment as a means of behaviour control.

2. Educators with less than 16 years' experience support the use of corporal punishment while educators with more experience do not.

3. Educators favour the use of pupil-teacher conferences as the tactic to be used to control behaviour, no matter what the offense.

4. Educators favour the use of corporal punishment for three particular offenses: rowdiness (out of seat), sneering and swearing, and vandalism.

5. Educators favour the use of suspension for two particular offenses: sneering and swearing and vandalism.

Several implications arise from these five conclusions:

1. As an educator grows older, his/her attitude towards the use of corporal punishment changes from positive to negative.

2. As an educator's years of experience increases, his/her attitude towards the use of corporal punishment changes from positive to negative.

3. Educators try to involve the student in finding a means of controlling that student's improper behaviour.

4. Educators have a strong desire to control and, thus, have a strong dislike for sneering and swearing by students and vandalizing school property.

Recommendations for Further Research

The results of this study generate several recommendations for further research in the area of educators' attitudes toward corporal punishment. Further research is required to determine what factors would cause a young teacher's attitude towards corporal punishment to change from positive to negative. Is it due to aging alone or are other factors involved?

Corporal punishment was chosen by educators as a means of behaviour control. More research is needed to determine how effective corporal punishment is in modifying a student's improper behaviour. What method is most effective? What are the negative effects of corporal punishment?

One particular school offense in the questionnaire produced results which require further study. The offense of rowdiness: out of seat resulted in 43% of respondents choosing the response "sometimes" for using corporal punishment. Why do teachers feel that corporal punishment is necessary in such a case when most educators consider such a school offense as minor?

Another study should be undertaken where Part III of the questionnaire is expanded to include more discipline tactics. Instead of just suspension, corporal punishment and pupil-teacher conference, the questionnaire might include detention after school, physical restraint, restitution and reparation, consultation with principal, and consultation with parent. It would be interesting to see which tactic or tactics from this list would be chosen most often.

Finally, this study was carried out with the educators of a school board which allows the use of corporal punishment. A study should be undertaken to examine the attitudes of educators toward the use of corporal punishment in a school board not presently allowing such a discipline practice. The results of such a study could be compared to the results of this study.

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SCHOOL DISCIPLINE: AN ANNOTATED BIBLIOGRAPHY

V. Worona

The mental development of a child can take place only through learning. An individual changes by virtue of his/her experiences. Learning can take place only when there is some interaction between the organism and the environment. The rate of learning depends on a child's capacity for learning and the teacher plan employed to assist him/her in developing it. This plan may be called "discipline".

One does not discipline children; rather, children learn to live under a plan of discipline. And a plan of discipline does not necessarily make learning easier or less strenuous, but it may speed up learning and make it more pleasant.

An effective plan of discipline must induce the pupil not only to respect the rules, but also to wish to conform to them. But such a plan must, in addition, provide an opportunity for non-conformity, also within approved limits. Any plan which succeeds in obtaining blind obedience to its rules might be satisfactory and convenient to the teacher (dictator), but such a plan would eventually develop an unhealthy resentment in the "obeyer". An effective plan of discipline should be designed to train each member of the class and/or school to be willing to abide by the rules and regulations set, but not necessarily without question. If any member feels that certain rules are unjust or unwise, s/he should be able to propose changes. If a rule is continually being challenged, it needs to be re-examined.

Often, the success of a plan of discipline depends upon the adult personality. In a large measure the teacher or parent implies the social goals to be obtained. "Follow my plan and you will grow up to be like me", is implicit all the time the child is in the society of the adult. The teacher, regardless of his/her specific expertise, in the elementary school or in the university, and the parent in the house, by their behaviour set a standard of living, portray a philosophy of life, and suggest desirable goals. Thus, it is vital that a teacher get his/her own "house in order" before attempting to do the same with someone else's.

Students must be presented with consistent, just and reasonable plans of discipline under which they can live securely in an appealing environment where one can learn to conform without resentment. What the future holds for the coming generations depends largely on whether parents, teachers, and administrators become interested in the needs of children rather than in their own comfort.

Even though many of the listings presented in the selected bibliography differ in approah, outlook or style of presentation, there are several strands of commonality evident.

All of the writers agree that order and discipline are key ingredients to the teaching/learning process. Where some of these educators differ is in respect to what constitutes "good discipline".

A substantial majority are strongly opposed to the use of corporal punishment and suspension. The experts are convinced that these two approaches do more harm than good, especially in the long run. Suspension informs a youngster that the system has quit on him/her. Perhaps "it is better to be a black sheep than no sheep at all". The research indicates that other humane alternatives to handling discipline problems are much more positive, effective and long-lasting.

Some of the writers feel that a major source of school non-conformity and rebelliousness lies in the double standard presented to most elementary school children. On the one hand, society and the school try to instill a sense of "democratic pride" in our nation's youth. On the other, many of our schools are, in effect, totalitarian institutions where the chief occupants have little real influence. Is it not possible to have more democratic schools, without creating an anarchaic "laissez-faire" environment?

Overall, it is evident that what works for one teacher may not work for another. No plan of discipline is a complete, infallible package. There will always be children who challenge any plan. Thus, it is beneficial to periodically evaluate any program and to have alternative strategies in reserve.

After much consideration and a review of the literature, this writer offers several suggestions directed at the average teacher and aimed at improving classroom/school climate. For the sake of clarity and convenience, these are herin summarized:

1. Behave as a responsible adult who acts in a fair, firm and consistent manner. Teacher self-discipline (mannerisms, voice, disposition, sincerity,

punctuality, and concern for each pupil) is a must. Pupils need and expect this from an adult model.

2. Plan lessons to be interesting and challenging. Allow for individual differences. Each lesson plan should include material which the entire class is capable of handling; which some of the class can do; and which a select few may complete.

3. Get to know the pupils. Talk to them as individuals, not as their "buddy", but as a concerned teacher.

4. Establish your own classroom routines/rules. Ask for pupil input. Rules should be few, purposeful, clear and known to all (including parents). Display these routines in an attractive manner.

5. Try to use "preventive medicine" whenever possible. Thoughtful planning and foresight may do much to reduce the possibility of an unpleasant situation developing.

6. Plan the physical environment with the needs of the children in mind. Generally, a clean, attractive room with interesting and relevant displays proves to be far more stimulating than one with dusty chalkboards and unchanged bulletin boards.

7. As a staff, establish a parallel set of routines for all common areas such as hallways and washrooms. Work cooperatively; no single teacher is capable of carrying on a personal crusade.

8. Reward/reinforce positive behaviour instead of always making an issue of any inappropriate act.

9. Delegate certain responsibilities to the children. This is the first step to teaching self-discipline.

10. Try not to isolate yourself from the parents. Most are just as concerned with their child's progress as you are.

11. Refrain from making idle threats. Any threat is actually a challenge for the pupil to misbehave. Once a child is threatened, his/her reputation among th e peer group may be at stake.

12. Avoid public confrontations with any pupil. Try not to embarrass a child. Praise in public and scold in private.

13. Remember that each child is a unique person. Even though certain routines and consequences may be

spelled out, it is sometimes unwise to commit oneself to any single course of action.

14. Try not to rely on one or two discipline techniques, and force them to work. Alternative strategies may prove to be most helpful.

15. Ask for administrative support (principal, psychologist) when needed. No one can "walk on water".

16. Adopt the positive attitude that children are not really "bad"; some just have bad habits. Try to be kind to them in their failures. The teaching technique is usually at fault.

In summary, this writer's annotated bibliography is an attempt to draw together many recent sources related to the subject of School Discipline. Its primary purpose is to examine some of these writings in order to gain further insight into this topic. A secondary aim is to provide teachers and/or administrators with a few practical avenues of approach in dealing with classroom/school management. The techniques outlined range from the use of corporal punishment to more humanistic thinking. Included are references from books, documents and journal articles.

From the literature noted, one thing is very clear - a lack of effective discipline in today's schools is a major concern. Not only are teachers concerned with disruptive behaviour in the school, but the general public is concerned as well. In fact, many parents feel that disciplining children is one of the more serious problems schools must deal with. Until school boards, administrators and teachers begin to concretely recognize this fact, rather than make ineffectual token attempts to cope with it, ineffective discipline "systems" will continue to exist.

TEACHING TEACHERS: A MODEL FOR IN-SERVICE FOR TEACHERS OF HIGH SCHOOL ENGLISH

Carol A. Ramberan

There seems to be a certain confusion among high school English teachers about exactly what to teach and how and when to teach it. Now that the Ministry Curriculum Guidelines at the Intermediate and Senior Levels are guidelines and not prescriptions, teachers are increasingly being asked to teach and plan in ways that are new for them and for which little or no in-service training has been planned to help them. When the Intermediate Division English Guidelines (1977) came out, teachers found that they were faced with the enormous task of making decisions for which they were not initially trained. For instance, the document required teachers to "assess the stage of development of each child and on the basis of this assessment determine the forms of instruction appropriate for him" (p. 7), and to plan for "appreciably more than half of classroom time" to be devoted to "providing students with opportunities to be actively involved in personal reading and writing" (p. 8). It also said that the teaching of grammar "can be accomplished by using an eclectic approach, culling some of the many valuable principles and strategies of the descriptive grammars and using the best insights of scholarship to meet the students' differing needs for structure at appropriate points in their training (pp. 15-16). The individualizing of instruction, the study of not one, but several descriptive grammars, and then the abstraction of salient points suitable for certain students at certain times, seemed a formidable task for teachers who were used to teaching the class as a whole most of the time and who followed a course of studies which had been written by a Department Head or a Supervisor of English.

Even now, five years later, teachers are unsure about the best procedures to use, especially in the light of recent linguistic and reading research which suggests quite different approaches to language learning from those traditionally practised by teachers. In addition, teachers are increasingly being asked to create the courses which they teach. This, in itself is an admirable step for education in Ontario, but a problem arises when teachers are faced with innumerable choices, and no clear focus for

curriculum planning is provided. Which aspects of which grammars should be taught, for instance, and what kinds of writing and thinking prerequisites are necessarary for students to master specialized writing forms like the precis, paraphrase, and prose or poetry appreciations? What reading methodologies work best for what kinds of students? Exactly how do you teach teenagers to speak and listen more effectively when their personal patterns of communication are already well entrenched in their personalities? Unless teachers have a strong, clearly-articulated focus for writing curriculum, they might not develop courses which plan, systematically and sequentially, through the years, for student progress.

The re-training or continued training of teachers, then, becomes a very vital issue. How can Supervisors, Consultants and Department Heads assist the teachers to do what is required of them, as laid down in the Ministry Curriculum Guidelines?

The purpose of this project was to expand on a "concern-based" framework for teacher professional development and to identify and growth-strand some important learnings which teachers need in order to teach English effectively at the high school level. The model of in-service which the project presents is based on the following assumptions: (1) It is possible to determine a teacher's level of professional growth by evaluating his expressed concerns about teaching; (2) It is possible to identify a teacher's level of skill/concept development according to carefully constructed growth strands of appropriate learnings; (3) It is possible to plan in-service sessions to meet the needs of a teacher which will (a) teach him what he needs to know to be a better teacher, (b) lead him to a higher level of personal professional development, and (c) increase his consultancy potential in his department.

One of the complaints about in-service is that it fails to meet the needs of the teachers. Either it is too theoretical or too specific, a "rehash" of topics previously considered a "way out" in its implications, suitable for certain "types of personalities" or suitable for none. Teachers, therefore, do not perceive the in-servicing as valuable, and their planning and teaching are not affected to any significant degree after having gone through the in-servicing experience.

If, on the other hand, in-service sessions were planned to meet the needs (or the perceived needs) of the teachers and based on actual expressed concerns of the teachers involved, then information, ideas and procedures would be taken seriously and perhaps incorporated into the teachers' curriculum planning.

Wheeler and Kass suggest that there are three clearly distinguishable stages in a teacher's professional development, and that each stage can be described according to his educational concerns and behaviour. The stages could be viewed as logic on a continuum with teacher-centeredness at one end and student-centeredness at the other.

STAGE ONE	STAGE TWO	STAGE THREE
Concern over self (Teacher-Centered Period)	Concern over Instructional Matters (Content-Centered Period)	Concern over Individual Learning Problems (Student-Centered Period)

A teacher's stage of professional development can be easily identified by his responses on "concern-based" questionnaires or checklists. But determining this is only the first step in planning effective in-service. Very important is the next stage - the process of (1) determining and growth-stranding the learnings which teachers need to have in order to plan properly for students' learning in the language area, and then (2) identifying each teacher's level of knowledge or skill competence on each of the pertinent growth strands. When these learnings are clearly described and teachers' proficiency in these areas identified, then reasonable, systematic planning can proceed for in-service sessions which will lead teachers further "up the ladder" of competence in the areas which are vital for good language teaching.

This approach is no different from planning for anyone's learning. A teacher needs to (1) identify the learnings he wishes to teach, (2) identify the components for those learnings, and (3) growth strand on a hierarchical grid the levels of growth involved in those learnings. At that point, the teacher has a framework for identifying

instructional objectives, and for diagnosing and evaluating the learnings. In addition, he knows exactly what the prerequisite learnings are, what the sequential ones should be and how they interact with other related learnings.

Growth strands are based on the assumption that certain concepts, skills and behaviours are acquired in a sequential manner; that is, that there are stages or steps through which a learner progresses as he develops those concepts, skills and behaviours. Any learning can be described and the steps through which a learner progresses identified and seriated in a hierarchical manner. The growth strands which result can be very general in nature (e.g. a concept such as growth), or specific (e.g. formulating a good topic sentence).

Learning: Conception of growth as a progressive restructuring of the organism.

L.5 Growth as restructuring
L.4 Growth as sequential steps
L.3 Growth as accretion
L.2 Growth as simple aging
L.1 Growth as unpredictable change
L.0 No articulate concept of growth

Behaviour: Formulation of a good topic sentence.

B.4 Formulates a topic sentence which controls the development of both ideas and structure
B.3 Formulates a topic sentence which organizes the ideas in a paragraph
B.2 Formulates a topic sentence which introduces the ideas of a paragraph
B.1 Writes a topic sentence which sounds somewhat like a main idea (general in nature rather than specific)
B.0 No notion of how to write a topic sentence.

Growth strands can span many different types of learnings from a teacher's conception of curriculum, to his perception of his role, his need for an eclectic approach, to his teaching strategy and the need to teach students to evaluate their own and others' work.

Learning: Notion of curriculum as an all-encompassing concept.

1.5 Notion of curriculum as all-encompassing (addressing itself to matters concerning educational theory, subject content, planning, procedures, characteristics of teachers and learners, teaching/learning environments and evaluation).

1.4 Notion of curriculum as including content,methodology, rationale (theory), and teacher and student chararacteristics.

1.3 Notion of curriculum as what is to be taught, how and why.

1.2 Notion of curriculum as content plus methodology.

1.1 Notion of curriculum as a course ofstudies to be taught.

2.6 Teacher interprets his role in inter-actional terms (i.e., in terms of role theory).

2.5 Includes in his professional stance the personal attributes of openness and invitation.

2.4 Recognizes the importance of interpersonal factors in teaching and learning.

2.3 Sees role as organizer of information, classroom grouping, and time.

2.2 Sees function as information giver.

2.1 Interprets his role in the classroom as controller, arbitrator, and manipulator.

Learning: Treat difficult assignments (e.g., prose and poetry appreciations) as complex strategies.

3.6 Treat prose and poetry appreciations and other difficult assignments aas complex strategies.

3.5 Prepare a sequence of activities based on growth strands of thinking skills and prerequisite knowledge.

3.4 Identify basic thinking skills involved in organizing and writing an appreciation.

3.3 Identify and growth strand prerequisite knowledge in the component areas.

3.2 Identify and give pracitce in component areas (e.g., purpose, tone, structure, diction).

3.1 Give the format and expect students to be able to do it.

Learning: Need to use an eclectic approach to reading/writing instruction.

4.4 Chooses appropriate methodology from relevant theories/procedures/approach es to meet instructional objectives, gi ven specific task and student character istics.

4.3 Knowledge of various aspects of different theories/procedures/approaches w hich work well given specific task and studen characteristics.

4.2 Some understanding of various approaches with little knowledge of applicat ion i n specific contexts.

4.1 Vague notion of different approaches and theories of instruction.

4.0 No knowledge that alternate methodologies exist.

Learning: Importance of peer evaluation.

5.6 Based on clearly taught criteria for evaluation, peer evaluation is a valu able learning experience.

5.5 Recognition that evaluating organizers and suggesting improvements helps d evelop organizational skill.

5.3 Notion that writing for various audiences (rather than for the teacher onl y) improves style.

5.2 Peer evaluation used as a time-saver by the teacher.

5.1 No importance attached to peer evaluation.

The project suggests growth strands for forty-nine teacher learnings divided into three categories: (A) Planning (including curriculum presuppositions, planning for instruction and diagnosis); (B) Implementation (including classroom dynamics, the teacher's perception of his role, implementing instructional units and integrating communication skills); and (C) Evaluation (student, peer and teacher evaluation). It also describes, step by step, a series of in-service sessions for a high school English Department incorporated into the context of writing a unit of studies on "The Family" for General Level Grade Ten students.

When we are planning in-service for teachers of high school English, it seems reasonable to apply the same procedures that we do for our students, that is, diagnose the needs

based on appropriate growth strands, plan instructional activities that would lead the teachers one or two steps beyond where they are, and evaluate the results. Teachers have to be carefully prepared so they will be confident and knowledgeable in developing their students' intellects and influencing their behaviour. Colleges and Boards of Education are faced, as never before, with the task of organizing pre-service and in-service education which will enable teachers to grow professionally and to carry out, more efficiently and effectively than ever before, their multitudinous tasks which are simplistically labelled "teaching".

The model presented in this project should serve as a useful one, one which diagnoses what needs to be done according to a carefully prepared and justifiable framework, one which indicates the direction, type and content of in-service needed and which offers itself for immediate integration into the in-service programming which is badly needed in Ontario today.

NOTES

1. Wheeler and Kass in "A Concern-Based Developmental Sequence of Teacher Professional Growth". See Bibliography below.

Cf. Appendix A of the project and the explanatory sections in Chapter 1 (pp. 5-12).

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A SURVEY OF THE PERCEPTIONS OF ONTARIO EDUCATORS REGARDING THE IMPORTANCE OF AND NEED FOR TRAINING IN SELECTED CURRICULUM PROCESS SKILLS

A. Shynal

During the 1970's, the need for formalizing professional development in curriculum processes became a major focal point in educational deliberation. In the province of Ontario curriculum decision-making has been decentralized and the boards of education have assumed greater responsibility for interpreting the broad policy statements within the curriculum guidelines issued by the Ministry of Education. As a result, professional staff of the boards have been assigned curriculum consultancy responsibilities related to the design, development, implementation, and evaluation of all school programs from the primary through the senior divisions.

In response to the growing concern for the development of curriculum leadership skills the Ontario Institute for Studies in Education (O.I.S.E.) designed and implemented the Curriculum Choice and Decision project. A direct development of this project was an experimental graduate program in educational consultancy offered in the Niagara Region through Brock University and Niagara Centre: O.I.S.E. and in Northeastern Ontario by Northwestern Centre:O.I.S.E.

Following a pilot trial of a program sequence during the 1976-77 academic session it was determined that a survey of educators throughout Ontario would be a desirable method of collecting data to compare client perceptions against the core components of the programme and to determine the variations in perceptions among the various sub-groups in the educational community.

The major concerns of the survey were:

1. Determine the perceived needs for and perceptions of relative importance of the various curriculum process skills involved in this graduate program

2. Assess the size of the potential student population for a program based on curriculum process skills

3. Compare the perceptions of various client groups

The major objectives established as the core components of the curriculum program were employed in the construction of the survey form (refer to Figures 1 & 2). The list of objectives was slightly modified; the statements were simplified and clarified to improve interpretation to suit the range of client groups in the sample.

The number of returns included for purposes of data analysis totaled 741 properly completed questionnaires. The complete sample size involved 1592 subjects and the survey achieved a 47% rate of return.

All curriculum Process Skills received meaningful support from respondents in terms of Importance to the curriculum development process and Need for professional training. From the responses to the survey, the Programme in Curriculum Processes contains objectives which appear to be considered important by the client groups in the study (refer to Figure 3).

The results of this survey guided specific changes in graduate programming at both Brock and O.I.S.E. The needs of specific client groups, especially those educators involved in consultancy, curriculum development and educational innovation in programming were identified and additional courses were designed and implemented by Brock and O.I.S.E. Expansion of graduate course offerings was undertaken in several regions of the province and faculty from both institutions greatly increased their participation in board level professional development activities and training programmes.

Figure 1

GENERAL OBJECTIVES OF THE PROGRAM IN CURRICULUM PROCESSES

1. Knowing how to develop a personal sense of direction in respect to the school's curriculum: the role, in relation to this task, of foundation disciplines, current "world views", Ministry guidelines, Board objectives, and public opinion.

2. Knowing how to interpret Ministry guidelines: how to identify the general positions taken and alternatives to these positions: how to identify main emphases, particularly those differing from current practice, and the implications of these emphases for changed school programmes.

3. Knowing how to develop a set of priorities for curriculum action from guidelines, Board objectives, student performance data, and the practical requirements of the situation.

4. Knowing how to develop and evaluate plans (models) for the orderly management of curriculum development, implementation, and evaluation in a department, school, or Board.

5. Knowing how to analyze complex (new) objectives into manageable sub-components, and how to schedule growth over the grades.

6. Knowing how to determine the practical implications for a particular setting of a piece of educational research.

7. Knowing how to choose between competing curriculum materials for use in particular contexts.

8. Knowing how to devise classroom methodology for new objectives.

9. Knowing how to combine content, skill, and value objectives in the construction of teaching units.

10. Understanding the variety of evaluation techniques available to answer particular kinds of evaluation questions.

11. Knowing how to devise test items for a variety of purposes.

12. Knowing how to report and interpret evaluation data in a form that is useful to decision making.

13. Knowing how to interact with curriculum groups in a way that makes their deliberations and decision-making more rational and productive.

14. Knowing how to develop openness to change in a school staff.

15. Knowing how to develop staff commitment to a set of common goals.

16. Knowing how to develop organizers for sets of concepts and skills to be included in specific content areas.

Figure 2

SAMPLE OF SURVEY QUESTIONNAIRE (PART ONE: IMPORTANCE OF PROCESS SKILLS)

PLEASE INDICATE WHICH OF THE FOLLOWING STATEMENTS OF OBJECTIVES YOU BELIEVE TO BE IMPORTANT IN THE EDUCATIONAL ENTERPRISE, PUT A CHECK ( ) BESIDE EACH WHICH YOU THINK SHOULD BE INCLUDED WHEN PEOPLE ARE TRAINED FOR YOUR JOB.

1. Knowing how to develop a sense of direction for curriculum activities by specifying the major components to be included in the new curriculum and identifying the contexts in which the components should be employed.

2. Knowing how to develop a set of priorities for curriculum action by assessing the relative importance of various projects, the degree of local need for each, and the practicability of action.

3. Knowing how to develop and evaluate plans (models) for the orderly management of curriculum development, implementation, and evaluation in a department, school, or Board.

4. Knowing how to implement Ministry guidelines by identifying the general positions taken and comparing these to alternative positions, and by referring these to local conditions and needs.

5. Knowing how to analyze complex (new) objectives: analyzing behavioural traits to identify developmental series of sub-components, and devising ways of scheduling growth over the grades.

6. Knowing how to analyze complex (new) objectives: analyzing complex intellectual skills to identify developmental series of sub-components, and devising ways of scheduling growth over the grades.

7. Knowing how to analyze complex (new) objectives: analyzing knowledge components to identify developmental series of sub-components, and devising ways of scheduling growth over the grades.

8. Knowing how to employ the theoretical and research literature to assist in identifying the fullest range of curriculum possibilities, in developing

comprehensive sets of behavioural traits, intellectual skills and knowledge components, and in devising appropriate implementation and evaluation strategies.

9. Knowing how to devise an appropriate set of selection criteria when choosing among competing curriculum materials. The selection criteria should reflect the concerns for curriculum characteristics included in the other objectives listed here.

10. Knowing how to combine knowledge, skill and value components in the construction of teaching units.

11. Knowing how to devise an evaluation strategy appropriate to the range of curriculum questions to be answered, employing evaluation items which reflect growth sequences in behavioural traits, complex intellectual skills, and knowledge.

12. Knowing how to devise classroom methodology for new objectives.

13. Knowing how to interpret evaluation data and construct reports in a form that is useful to decision makers.

14. Knowing how to interact with curriculum groups in a way that makes their deliberations and decision making more rational and productive; ensuring the application of the required technical and interpersonal skills by the appropriate individuals and groups.

15. Knowing how to develop openness to change in a staff group.

16. Knowing how to develop staff commitment to a set of common goals.

17. Other. (Please specify).

Figure 3

The Eight Most Popular Curriculum Process Skills based on their Importance to the curriculum development system and the Need for professional training.

RANK	IMPORTANCE	
1.	Construct Teaching Units	73.1%

2.	Develop Staff Commitment	72.9%
3.	Implement Ministry Guidelines	70.4%
4.	Develop Openness to Change	69.5%
5.	Priorities for Curriculum Action	69.4%
6.	Sense of Direction	68.7%
7.	Devise Classroom Methodology	67.9%
8.	Develop Curriculum Plans	67.3%

RANK	NEEDS	
1.	Develop Staff Commitment	51.1%
2.	Develop Openness to Change	47.3%
3.	Construct Teaching Units	46.1%
4.	Devise Evaluation Strategy	43.2%
5.	Develop Curriculum Plans	42.7%
6.	Priorities for Curriculum Action	42.0%
7.	Use Research Components	40.3%
8.	Report Evaluation Data	40.3%

Curriculum Process Skills identified by the Total Sample as being both Important to the curriculum development system and Needed by decision makers for professional training (from the top 8 selections).

Skill #

2. Priorities for Curriculum Action.
3. Develop Curriculum Plans.
10. Construct Teaching Units.
15. Develop Openness to Change.
16. Develop Staff Commitment.

NEW DIRECTIONS IN GRADUATE EDUCATION

Chairman Allan C. Bennett

Before I make any effort to project forward, a brief overview of the recent past might be a productive starting point. Let me begin by saying that every effort has been made at Brock to make the M.Ed. experience both professionally and personally meaningful. Our Department regards this as a central purpose of its operation and our faculty are committed to this objective.

Our organizational procedures are so structured that we make available a faculty counsellor for course selection, for questions and for orientation. We allow you to select courses within a suggested framework. We facilitate the registration procedure and have faculty there to help. Students select their own faculty advisor for project and thesis then work on a mutually acceptable schedule to complete it. Let me assure you as well that my office line is always open to help and I invite you to contact me with problems and difficulties that you might experience in this regard.

The sub-streams of the M.Ed. program are curriculum, foundations of learning and teaching behaviour, and educational administration. The calendar provides detail on courses including the course description and its designated place in the structure. Certain features relative to courses can be pointed out.

It is our purpose to build programs, especially in the curriculum sector, rather than have students pick from a vast array of unrelated courses. Flow charts are available for such areas as environmental studies, curriculum processes, and early childhood education.

We have built a sociological and a special education emphasis into the foundations section to go along with the psychological and historical dimensions of foundations.

We have a well-defined, concise educational administration program. We range from leadership and supervision courses to organization behaviour, organizational development, social and legal contexts, and educational finance.

We offer a good general range of special courses. These

courses are in research and design, in measurement and evaluation, and in assessing teacher effectiveness.

We have sharpened up our 'administrative procedures'. We have introduced a three-term system for summer, fall and winter with no intersession squeezed between winter and summer. We have a summer session in which there is a July-only class timetable, as well as a winter session beginning late in January in an effort to try to avoid rough driving weather.

We issue a newsletter twice a year to orient you to vital information. Also we have an on-line system for project/thesis information. We shall continue to offer courses at three campuses with the cycling of all regular courses within these environments.

I wish now to speak of the future of Graduate Education at Brock University. The Council of Ontario Universities has just released a document called "Squeezing the Triangle", a review of the 1978 to 1982 period. In this document they comment, "The past four years have been marked by a continuing drift of the Ontario universities closer to the shoals of serious financial difficulties" (p. 1). As a result of this, universities are being forced to do more with less.

In all likelihood this trend of attempting to do more with less will continue at Brock. It does us well to ask ourselves, however, what specific meanings this might have for the M.Ed. program.

I believe it means first that there will be no expansion of the given system. A great number of new courses are not likely to be added, new programs that develop will be squeezed out of existing programs and expansion, in terms of numbers of students and faculty members, is not likely to take place.

Secondly, it means an opportunity to concentrate on quality of programs. Ralph Tyler, the grandfather of curriculum theory, makes comment in an article he wrote for the June 1982 Phi Delta Kappan magazine that education was not in decline - even though enrolments and budgets may be. During this time we should improve the system and solve problems. Within the graduate sector we have an opportunity with a well-developed structure in place to concentrate on improving its quality. We want to perfect our organization, make it more dynamic and able to participate and to respond to changing needs. This is an opportunity in a democratic society.

Given present financial climate, I do not think there is any point in thinking in terms of a doctoral program in Education being established at Brock. The province is on record as being committed to a policy of non-expansion of

doctoral programs. I think it wise to state this, to lay to rest any hopes that individuals in the area might have had for Brock developing a program at the doctoral level in the near future.

However, there may be some hope in looking at a model pioneered in Ontario at OISE. They have in place an Advanced Diploma in Education, available to graduate students over and beyond the M.Ed. The department has examined this Diploma idea at its October meeting, and will continue to examine the idea. I shall keep you informed as discussions continue.

Finally, let me express the hope that your M.Ed. at Brock has been or will be both personally and professionally rewarding. We hope our programs continue to be relevant. We hope to continue to improve our administration. The future presents a real opportunity to quality control. We hope education is not in decline at Brock.